

MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

Vol. XIII. No. 13.
WEEKLY.

BALTIMORE, MAY 5, 1888.

\$4.00 A YEAR.
SINGLE COPIES, 10 CENTS.

Sole Manufacturers of **EUREKA PACKING** **JAS. SMITH & CO.** Dealers in
Steam, Hydraulic and Locomotive Packing, Works, 413 to 421 Race St., Cor. of Crown. **MANUFACTURERS', MILL and ENGINEERS' SUPPLIES**
OF EVERY DESCRIPTION.
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WE MAKE ROLLS AND PORTABLE MILLS COMPLETE.
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MORSE ELEVATOR WORKS.
MORSE, WILLIAMS & CO. Successors to CLEM & MORSE
Manufacturers and Builders of HYDRAULIC STEAM, ELEVATORS With most approved Safety Devices.
ELECT and Hand-Power, PASSENGER and FREIGHT Dumb-Waiters, Automatic Hatch-Doors, &c.
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Works: FRANKFORD AVE., WILDEY & SHACKANAXON STS.
Branch Office, 108 Liberty Street, NEW YORK.

Send for Illustrated Circulars.

Report of the AQUEDUCT Commissioners.

[NEW CROTON AQUEDUCT, NEW YORK.]

AN ELABORATE VOLUME, CONTAINING AUTHORITATIVE TABLES BY THE CHIEF ENG., B. S. CHURCH. JUST ISSUED.

PLANT (by actual count from Table 13.)

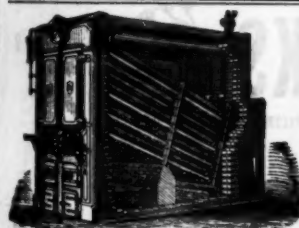
Number of Ingersoll Drills used..... 249
Number of Drills of all other kinds used..... 103

PROGRESS (by actual figures from Table 8.)

Average weekly progress in best 10 headings that used Ingersoll Drills exclusively (omitting all idle ft. works)..... 38.72
Average weekly progress in best 10 headings that used other drills exclusively (omitting all idle weeks)..... 31.68
DIFFERENCE OF 30 PER CENT. IN FAVOR OF INGERSOLL DRILLS.

All headings where Ingersoll Drills were used exclusively have been completed, except the section under Harlem River, now being driven by Ingersoll Drills and Air Compressors. Send for description of Aqueduct, with Engineers' Tables of Progress and Catalogue. Sent free. We have procured a limited number of the Report of the Aqueduct Commissioners, and will send them by express on receipt of \$5, actual cost to us.

INGERSOLL ROCK DRILL CO.,
10 Park Place, New York City.



ROOT'S NEW WATER TUBE STEAM BOILER.

Safe, Economical, Durable.

Recently adopted by the BRUSH ELECTRIC LIGHT CO., at Louisville, the EDISON ELECTRIC LIGHT CO., Detroit, and the COLUMBUS EDISON ELECTRIC LIGHT CO., Columbus, Ohio.

Abendroth & Root Manufacturing Co.

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A. B. FIERCE, Eng., 64 Johnston Building, Cincinnati, O.
WILLIAM H. SMITH, Eng., 118 Dearborn St., Chicago, Ill.
CHAS. E. ASHCROFT, Eng., 68 Mason Bldg., Boston, Mass.
JOHN S. MOORE, 189 Gravier Street, New Orleans, La.
T. D. PACKER, Shildley Building, Kansas City, Mo.
V. MERRILL, 107 N. Third Street, Phila., Pa.
S. C. DODGE, - - - Chattanooga, Tenn.

Cotton and Woolen Mill Supplies, THOS. K. CAREY & BROS.
LEATHER and RUBBER BELTING, LATHES, PLANERS, DRILLS. 21 S. CHARLES ST., BALTIMORE, MD.
Write for New Machinery Catalogue.

THE MEDART PATENT WROUGHT RIM PULLEY.
OVER 300,000 NOW IN USE. THE LIGHTEST, STRONGEST, BEST BALANCED and CHEAPEST in the WORLD.
Shafting, Hangers, Couplings, &c.
MEDART PATENT PULLEY CO., 1806 TO 1816 N. MAIN STREET, ST. LOUIS, MO.
Stores: 99 to 101 W. Second St., Cincinnati. 24 & 26 S. Canal St., Chicago.

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COMPLETE OUTFITS FOR PLANING MILLS

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Send for catalogue and visit our extensive
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925 MARKET STREET.

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The Most Simple, Reliable, Durable and Economical in Existence.

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Refer to over 125 Machines in successful operation.

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Hydraulic Engineers,

Dayton, Ohio, U. S. A.



ESTABLISHED 1850.

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The people in each locality prefer patronizing a home firm, and you can just as well sell them their Lightning Conductors at the same time you are doing the tin or roofing work. We furnish printed directions, so that any one can put them up without difficulty. We also manufacture all kinds of

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Ready Mixed IRON ORE PAINTS, ASPHALTUM VARNISH, JAPAN DRYERS, PAINT OILS

HOISTING ENGINES FOR MINES, FURNACE AND FACTORY.

—Also, Superior Boilers.—

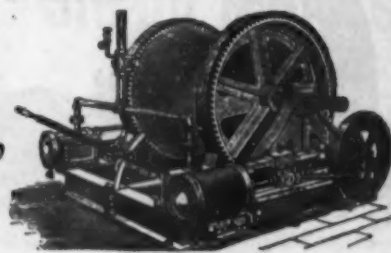


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FURNACE HOISTS,
Horizontal Engines

FOR MANUFACTURING.



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Moncrieff's Scotch Gauge Glasses.

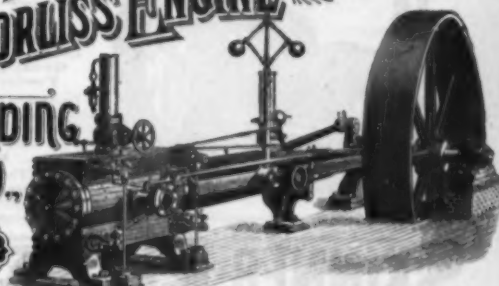
GENERAL AGENT CELEBRATED TANITE EMERY WHEELS.

NATIONAL STEEL TUBE CLEANER,

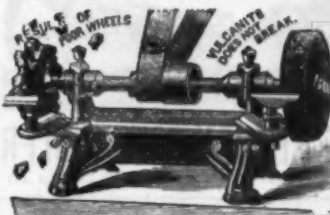


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FISHKILL CORLISS ENGINE
BUILT BY THE
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FISHKILL HUDSON, N.Y.



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The Original SOLID VULCANITE
EMERY + WHEELS.
Runs Easy and Safe, Cool and True.
Is More Durable—Hence Cheaper.
A trial will convince you of this. The
Knife-Grinding Wheels a Specialty.
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Formerly Myron Fish & Co., of Valley Falls, R. I., and Kendrick Loom Harness Co., of Providence, R. I.

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Of all Descriptions.

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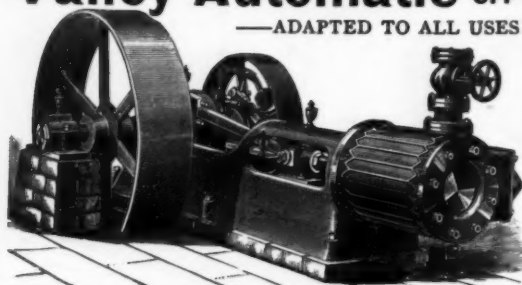
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Superior Regulation and Economical Use of Steam.
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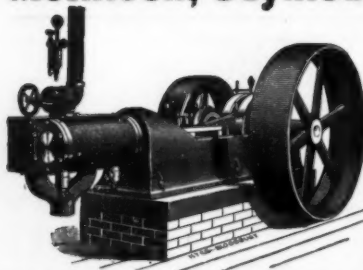
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5 to 300 Horse Power.

Economy in Fuel Consumption,
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Great Durability and Simplicity,
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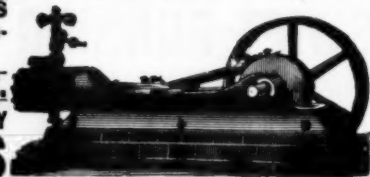
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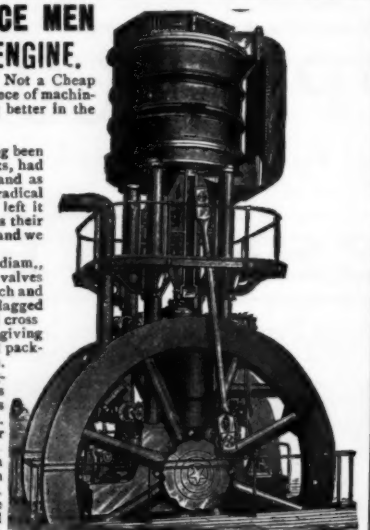
To purchase a **CUYAHOGA BLOWING ENGINE.**

SIZE.—Steam Cylinder 36x48; Air Cylinder 24x48. Not a Cheap Light Engine, but a Strong, Heavy and Substantial piece of machinery, good for 100 YEARS OF HARD USAGE. Nothing better in the machinery market.

The BLOWING ENGINE referred to is NEW, never having been entirely set up. Our predecessors, the Cuyahoga Works, had this machine partly built when we bought them out, and as we desired to move our Machine Shop and make other radical changes in the plant, we finished up this engine and left it standing in what is now the old erecting shop. It was their habit to keep these engines in the works all the time, and we expect to do the same when other work will permit.

DESCRIPTION.—This one has steam cylinder 36 in. diam., 48 in. stroke, blowing cylinder 24 in. diam. Four rolling valves on the steam cylinder, giving separate adjustment of each and minimum waste in steam passages. Cylinder neatly lagged with wood and covered with Russia's iron. Cast steel cross head straddling piston rod and secured to it by taper pin, giving a flexible connection. Wind piston is packed with wood packing in sections, breaking joints and held out with springs. Iron follower removable in sections and valves so arranged as to lose the least possible amount by air cushions and to entirely dispense with counterbalances and springs thereby securing great durability even with rapid motion. Fly wheels are cast in halves, securely bolted together and cored out to thoroughly counterbalance engine.

The above is complete from and including throttle with relief valve, flange for wind pipe connection, holding down washers and bolt ends. Delivered on cars or boat here. Shipping weight about 75 tons. We shall be glad to quote price to anyone wishing a first-class engine. It is offered cheap, considering its value. For further information



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FOR SETTING STEAM BOILERS.

Economy of Fuel, with increased capacity of Steam Power. Like the Siemens Process of Making Steel, it utilizes the waste gases with hot air on top of the fire. Will burn all kinds of waste fuel without a blast, including Black Coal, Sawdust, Logwood Chips, etc. Send for Circulars.

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Address **Enterprise Boiler Co., Youngstown O.**

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Engineers, Machinists and Boiler Makers,
WASHINGTON AVENUE AND FIFTH ST., PHILADELPHIA.

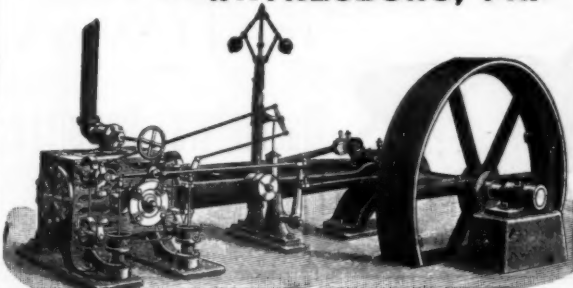
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—ALSO MANUFACTURERS OF—
BLOWING ENGINES, REVERSING ENGINES, STEEL AND HYDRAULIC MACHINERY, BOILERS, TANKS, Etc.
Steam Hammers, Centrifugal Pumps & Gas Apparatus.
INQUIRIES SOLICITED.

ECLIPSE CORLISS ENGINES.

Frick Company, Engineers, Builders,

—WAYNESBORO, PA.—



40 to 1,000 H. P. Made.

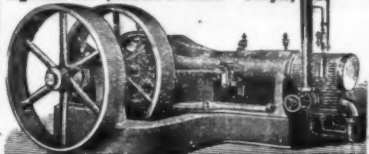
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Special Automatic Electric Light Engines, Steam Boilers, Tractors and Portable Engines, Saw Mills. Send for our General Catalogue.

BECK AUTOMATIC ENGINE.

For Electric Light, Flour, Cotton, Woolen and Rolling Mill Service and all other purposes requiring power. Economical in Steam Consumption. Does not race. Speed constant under varying loads and pressure of steam. Simple.



durable in construction. Requires no extra space than double disc engines. Contrasts



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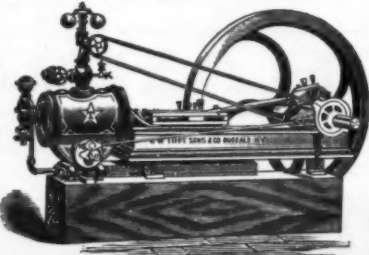
—) FOR THE LOWEST-PRICED FIRST-CLASS (— ENGINES & BOILERS

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GEO. W. TIFFT, SONS & CO.
BUFFALO, N. Y.

5 to 500 H. P. Special Stock Sizes 5 to 50 H. P., both Stationary and Semi-Portable.

A few good Second-Hand Engines and Boilers are for sale at an astonishingly low figure. Must be sold to make room for stock. Correspondence solicited. Mention this paper.



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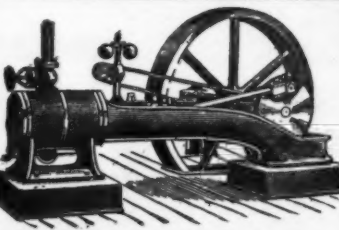
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Automatic Cut-Off ENGINES

Double Drum Derrick Engines. Single Drum Reversing Engines, suitable for Mines and Rapid Hoisting.

Correspondence respectfully solicited.

Catalogue sent on application.



Strong, Well Built, Serviceable

STEAM ENGINES

Adapted to Heavy, Continuous Work. Cost no more than ordinary Engines. For descriptive circulars, address

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Continental Boiler Scale Preventive.

Positively prevents and removes scale in steam boilers without acting on any of the metals. A real necessity for Southern steam users. Saves fuel, repairs and trouble, and doubles the life of the boiler. Sold on its merits, and satisfaction guaranteed or no pay. Write for sample.

The Gleason Boiler Compound Co., Cleveland, Ohio.

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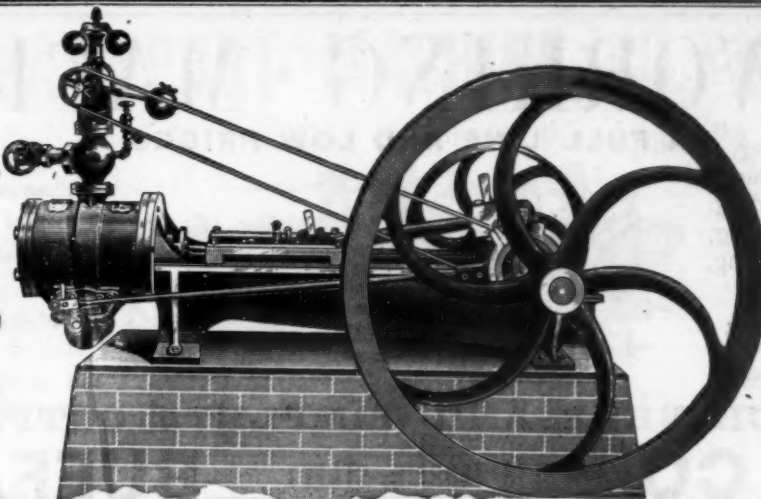
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Steam Engines,

In sizes from 4 to 50 H. P.,
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**SIMPLICITY, DURABILITY
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ALL SIZES,

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Orders filled at short notice.

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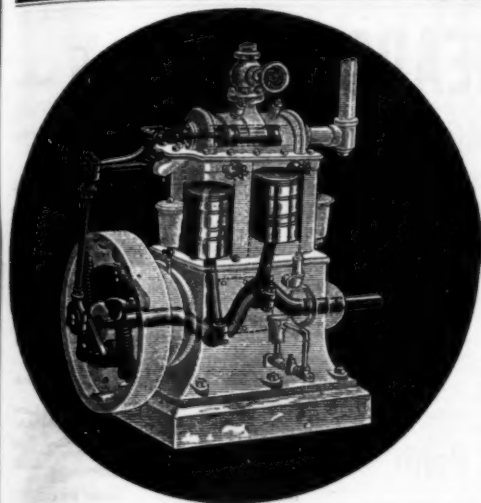
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Automatic Engine,

While embodying the essential features of
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**The Lowest Priced Automatic Engine in
THE MARKET.**

15, 25 and 35 H. P. only.

THE **Westinghouse Machine Co.**

PITTSBURGH, PA.

The Aultman & Taylor Company, represented by Roberts
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118 Chambers Street, N. Y. City, with houses in Panama, C.
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1330 Seventeenth Avenue.....Denver, Col.

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COLUMBUS MACHINE CO., Columbus, Ohio.

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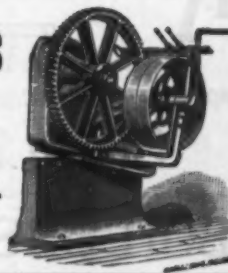
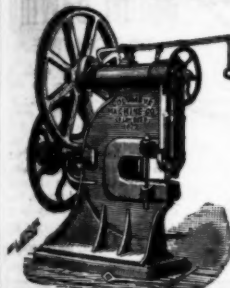
Blast Furnace, Stationary, Portable AND Hoist Steam Engines

Boilers, of all descriptions; Rolling Mills; Drop Presses; Shears for Rail, Bar and Plate
Rolling Mills; Punches and Shears—Single or Combined; Boiler and Sheet Iron
Rolls—Hand or Power; Boiler Makers' Shears and Punches; Shafting
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Blowing Engines, and Blast Furnace Work in all its branches, a specialty.

Also, HEAVY CASTING AND MACHINERY WORK.

BLAST FURNACE ENGINES ON HAND.

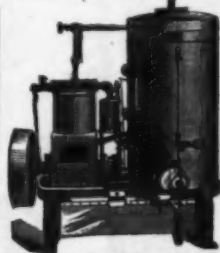


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Engines, Boilers & Complete Power Plants.
Highest award Silver Medal and Diploma
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Exhibition, Phila.

We are operating the finest and most
successful Electric Light Stations in the
world. A change of speed not exceeding
1 per cent. guaranteed, running light and
loaded. Send for catalogue.



Acme Automatic Engine,

With BRYANT'S Patent Safety Boiler.

Sizes 1, 2 and 4 H. P. Fuel, Kerosene (Coal) Oil, 110° to 120° fire test.
No dust, ashes, or smoke. No Skilled Engineer required. "Brake" Tests
show that 3 1/2 gals. fuel will deliver a full H. P. on belt for 10 hours, in the
case of our 1 H. P. Engine and Boiler.

Rochester Machine Tool Works,
BUILDERS, ROCHESTER, N. Y.

SEND FOR CATALOGUE.

Heavy Universal Milling Machine.

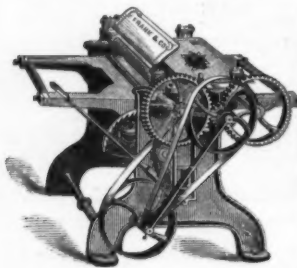
This machine for variety and range of work has no equal, and for workmanship it has
no superior. It will be found very valuable for builders of Locomotives, Portable and
Stationary Engines and Pumps; Machine Tool Builders and General Machine Shops,
as work can be done to better advantage and with greater precision than on Planers,
Lathes, Shapers, etc. It is designed for Boring, Facing, Turning, Milling, Profiling,
Key-Seating, Splining, Rack Cutting (any length,) Gear Cutting with the Vertical
Attachment up to six (6) feet in diameter, etc. **Weight, 6,000 Pounds.** Smaller sizes
of this machine are built. Circulars with full particulars on application.

PEDRICK & AYER,

1025 HAMILTON STREET, PHILADELPHIA, PA.

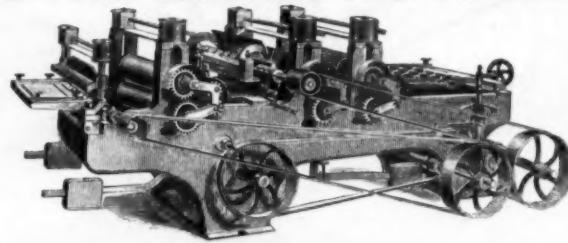


WOOD-WORKING • MACHINERY.

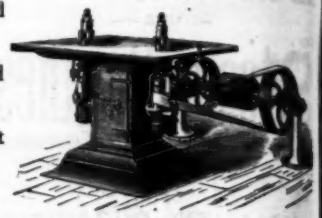


Planing,
Matching,
Moulding,
Tenoning,
Mortising,
Boring,
Shaping,
Carving,
Etc.

A FULL LINE AND LOW PRICES.

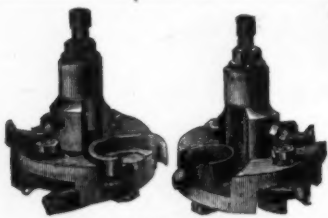


Write for
new illustrated
catalogue
(just out) and
our
latest price-list
Mention
this paper.



MACHINERY AND COMPLETE OUTFITS.

FRANK & CO. 176 TERRACE STREET BUFFALO, N. Y.

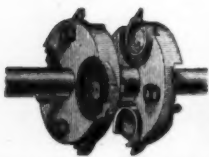


FLOORING MATCHER HEADS.

THE SHIMER MATCHER HEADS

The Cheapest! The Strongest! The Most Durable!

**AND YET THE LIGHTEST AND EASIEST RUNNING MATCHER HEADS
IN THE WORLD. UPWARD OF 25,000 SOLD.**



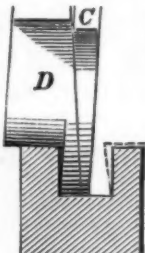
BOX BOARD MATCHER HEADS.



JOINTER HEAD.

The Bits are arranged in upper and lower series, and secured to a Head having seats alternately inclined for the purpose of giving the side clearance to their cutting points. This explains why these Bits hold their shape and turn out standard work until used up: the entire circle of Bit being tool cutting edge. This diagram represents a Bit (D) in the position it occupies when making a cut: the Bit (C) which follows to complete the work, is given in outline.

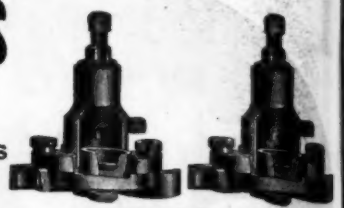
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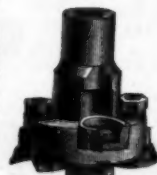
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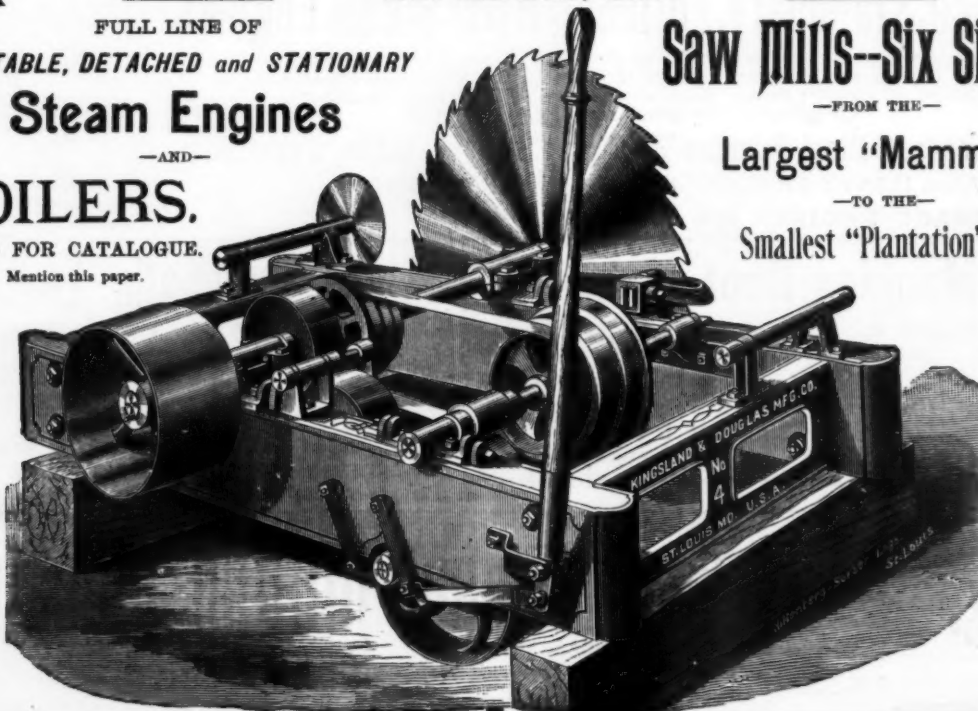
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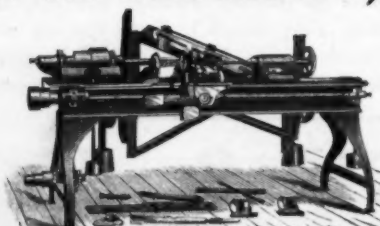
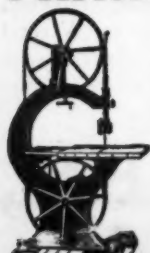


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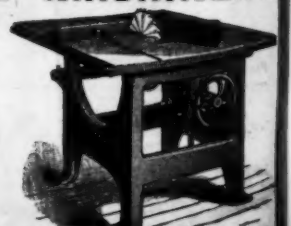


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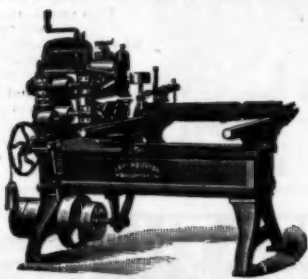
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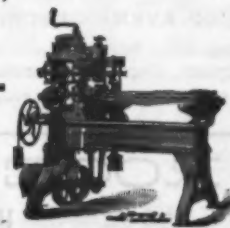
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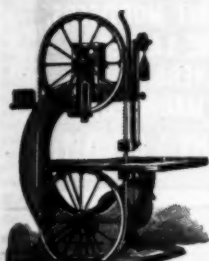
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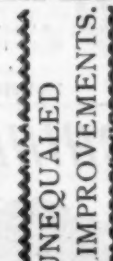
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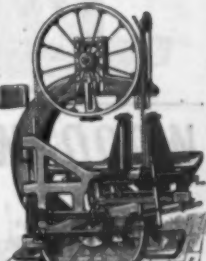
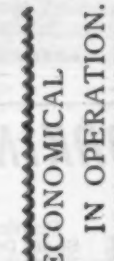
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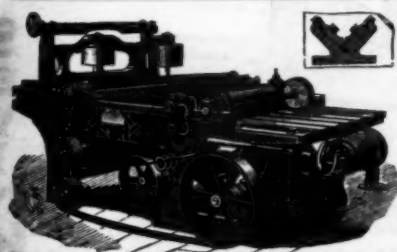


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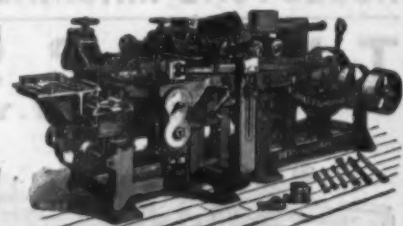
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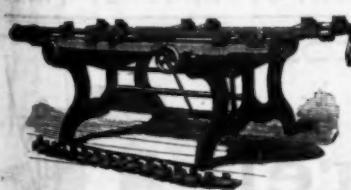
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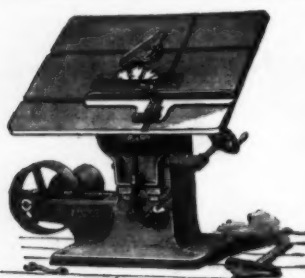
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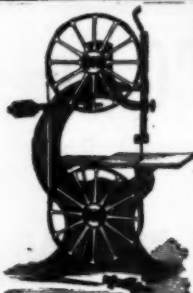
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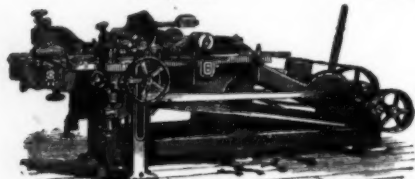
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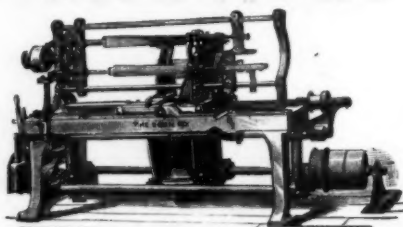
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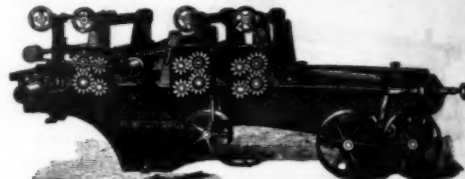
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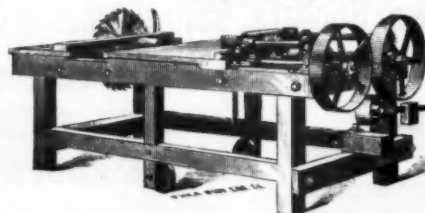
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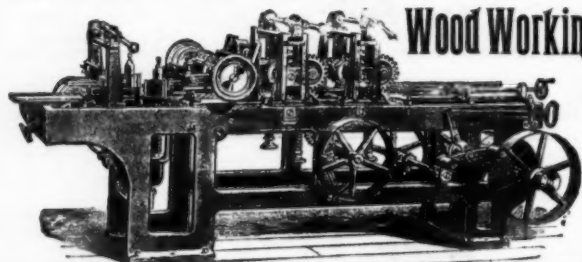
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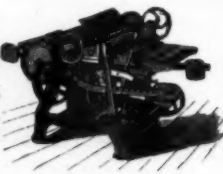
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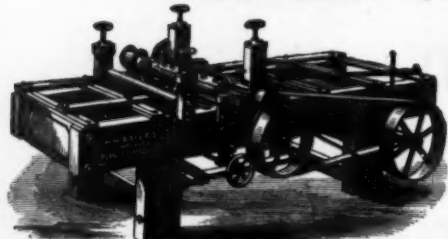
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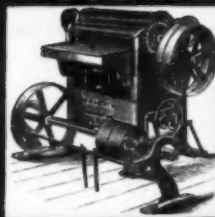
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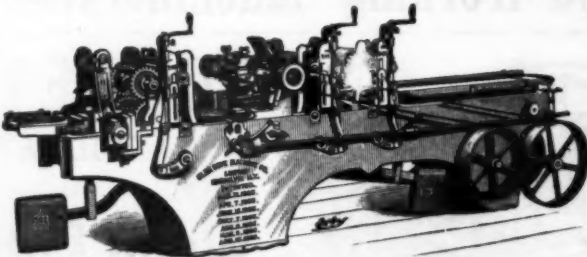


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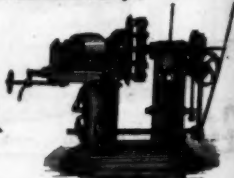
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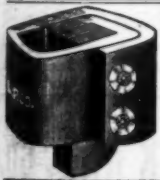
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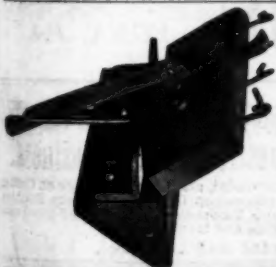
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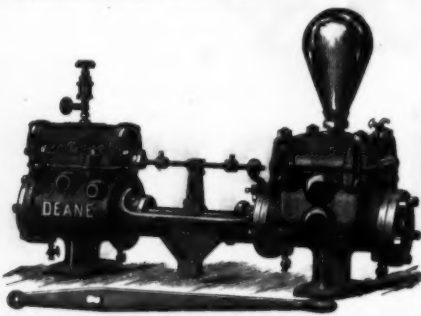
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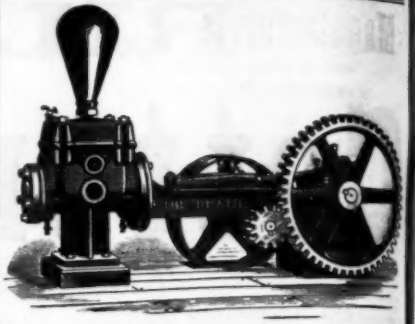
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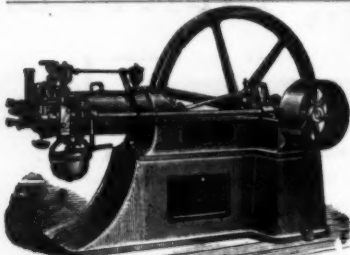
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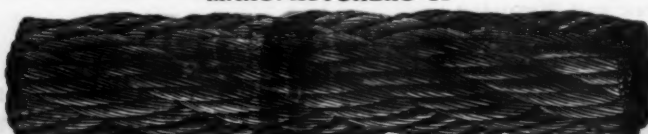
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INDIANAPOLIS, IND., April 6, 1888.

Editor Manufacturers' Record:

We are happy to say that the direct results from our advertisement in the MANUFACTURERS' RECORD have been very satisfactory. Our trade throughout the South since January 1 has more than doubled that of last year, and very largely we know this has come from the fact of your paper reaching to all quarters, and directly to those who are looking for improved machinery. Hardly a day passes that we do not receive letters saying "we see by the MANUFACTURERS' RECORD that you have improved brick machinery, etc. etc." We heartily recommend your paper as a medium for reaching the people.

Yours very truly,

FLETCHER & THOMAS.

F. F. Adams Co., Manufacturers of Patent Household Articles.

ERIE, PA., March 10, 1888.

Editor Manufacturers' Record:

The "ad." we have in your paper we consider one of the best investments we have made this year. We are receiving numerous enquiries from first-class houses, asking for catalogues and best cash prices. This is our second year with you, and we can trace a number of our orders direct to our "ad." in the RECORD. We have tried other papers who claim to reach the trade we are seeking, and have settled on the MANUFACTURERS' RECORD as being superior to all others for Southern trade. Yours truly,

THE F. F. ADAMS CO.

The A. M. Dolph Co., Manufacturers of Laundry Machinery.

CINCINNATI, OHIO, March 31, 1888.

Editor Manufacturers' Record:

We have been advertisers in the MANUFACTURERS' RECORD for some two years, and desire to express our satisfaction with the result to us. We find that your paper brings us inquiries from all points of the South. We also highly appreciate the information forwarded by you of new enterprises in our line of trade.

THE A. M. DOLPH CO.

E. W. MULLIKIN, Sec'y and Treas.

Cordeman Machine Co.—Wood- Working Machinery.

CINCINNATI, O., January 30, 1888.

Editor Manufacturers' Record:

Our "ad." with your journal has been running but three months, but from the solid returns received in this brief time we are constrained to say that in none of our other contracts made to reach the Southern trade have we found the practical results yours has afforded us. Truly yours,

CORDESMAN MACHINE CO.

Ideal Manufacturing Co.

NEW HAVEN, CONN., January 18, 1888.

Editor Manufacturers' Record:

We are very much pleased with the result of our experimental advertisement in the RECORD. We only had four issues, every other week, and have received 53 bona fide enquiries from three issues. You may make out contract for one year. Yours truly,

J. H. BARLOW,

Manager Ideal Manufacturing Co.

F. F. Waters Manufacturing Co., Manu- facturers of Smith's Patent Friction Drill.

BOSTON, MASS., February 4, 1888.

Editor Manufacturers' Record:

It gives us pleasure to state that our "ad." in the MANUFACTURERS' RECORD has brought us, on the average, about 30 letters per month. We consider it a paying investment. Respectfully,

F. F. WATERS MFG. CO.

Cordeman, Meyer & Co., Manu- facturers of Wood-Working Machinery.

CINCINNATI, O., January 11, 1888.

Editor Manufacturers' Record:

We are highly pleased with the returns from our advertisement in your journal, and take pleasure in recommending it to others in our line as a valuable medium for reaching the trade. Yours very truly,

CORDESMAN, MEYER & CO.

Savings Banks in the South.

In reviewing the needs of the "New South," a thoughtful man soon sees that a general system of savings banks is one of the most important. The fact that there are so many new ones now in operation shows that the prosperity of that section is on a solid foundation. While agriculture, and that of a special kind, remained the chief industry, the scattered population, untrained in habits of thrift, felt no need of a savings bank; pennies and nickels were despised, and dimes hardly counted worth noting. But with the growth of manufacturing, giving regular weekly or monthly payments, and with the increase of mechanics from the North and East, came a demand for a safe place of deposit for surplus earnings. That this demand is being met speaks well for the sagacity of the men who are leading the forward movement in the South, but that very much remains to be done cannot be doubted by one who has looked over the field.

The great enterprises of the country at large are carried forward to a considerable extent by the accumulated savings of the workmen. If one doubts this let him go to the savings banks of this city, with their 100,000 depositors and over \$30,000,000 of deposits, and find how many thousands and millions of dollars have been loaned to build factories, stores, &c., and how much to railroads to build their lines; how much to the city of Baltimore for paving streets, laying water mains, &c. The money put in savings banks is not withdrawn from circulation and hoarded in their vaults. On the contrary, it is to a considerable extent taken out of secret hiding places and put into circulation for the most useful purposes. The banks must lend the money out in some way to earn interest on it, and that it must be put to the best uses is apparent from the care which must secure the safety of the principal as well as interest. It is commonly thought that New England contains the best savings banks, but in a quiet way Baltimore has developed some institutions which, for careful, conservative management, and attention to the needs of their constituents, rank with any in the country. The Savings Bank of Baltimore, commonly known as "The Old Bank," being the oldest here, and the third chartered in the United States, dating back to 1818, and now having some \$16,000,000 of deposits, deservedly stands at the head. Next comes the Eutaw, then the Central, Metropolitan, Maryland, German, Provident and Hopkins Place, all well managed and doing much good. All except the Provident are run in one way, with one place of business open in the middle of the day, all of them practically in the center of the city.

The Provident has departed radically from this plan, and the success it has met with shows the wisdom of their plan, and the desirability of similar institutions in the South. Hence,

we give some facts of interest regarding its working.

Instead of confining its place of business to the center of the city, it has, in addition to its central office, seven branches in outlying sections of the city. Instead of only being open in the middle of the day, when working people are confined to their employment, its branches are open on Saturday evenings after the week's work is over and the week's wages received. Instead of declining to receive deposits less than one dollar, it provides for all by receiving as small a sum as ten cents or as large as any one will offer. To enable the clerks to receive deposits of small sums more rapidly than can be done by the usual way of writing a receipt in a book, the officers have devised a scheme of stamp deposits, similar in some respects to the English postal system. By this plan cards are given to small depositors, and adhesive stamps of 10, 15 and 25-cent denominations, lithographed in wording to form a receipt from the bank for the amount, are attached to the card for each deposit. When the cards are full the amount represented by the stamps is entered in a regular pass-book and another card begun.

A book opened at one branch can be deposited upon at any other, and drawn from at the branch where opened, or at the central office during the week, when the branch is not open. The account books, following a system of their own devising, are unusually well adapted to accurate work. The same interest is paid as at other banks, under the same rules. In short, there is no advantage given by any savings bank that they do not give, and the conveniences of location and business hours given by them are peculiarly their own. That these advantages are appreciated, the fact of the bank having 6,000 open accounts in less than two years from its organization conclusively proves. At two of the branches the business has grown so large that two nights are required to attend to it, Mondays as well as Saturdays; and at the one in the southeastern part of the city, the hours from 5 to 7 P. M. on Mondays and Thursdays are added.

The amount of good which an institution of this kind will do can hardly be estimated. The amount of money saved from wasteful spending and turned into channels of usefulness; the effect on the characters of the depositors, the saving to the charitable societies of the city resulting from the use of money in hard times saved during prosperous times, all must be taken into account, and then all is not counted.

The branch offices are usually in some store occupied by others for business purposes; thus entailing but very small expense.

The value of savings banks can hardly be overestimated, and this new feature of encouraging the mechanics and laborers to save little by little, and offering the opportunity of

depositing their money Saturday nights in places convenient to their homes deserves the warmest commendation. The South cannot do a better thing for itself than to encourage in every way possible the establishment of similar institutions, and in every city and town in that section the business men ought to take the lead in the matter.

The Hot Springs Convention.

The convention held last week at Hot Springs, N. C., was an assemblage of much more than common importance. It represented the wealth, the energies, the aspirations of the New South as no other body has done heretofore gathered on Southern soil. The governors of three great States—Virginia, South Carolina and Georgia—were there to give dignity to the occasion. Eight other States had delegations of influential citizens. His eminence, Cardinal Gibbons, of Baltimore, with a goodly array of bishops and priests, participated in the proceedings, and the Cardinal delivered an address replete with patriotic sentiments and practical suggestions. The outcome of the affair was the adoption of a plan for organizing the Southern Immigration Association. The perfection of its details was intrusted to Major John D. Keiley, Jr., of New York. This plan is the establishment of headquarters in New York City, the opening of a subscription in sums of \$1,000 each, and when \$20,000 are pledged, the calling of a meeting in New York of all the subscribers for the purpose of electing directors, enacting by-laws and doing all else necessary to set the machinery in active operation. It is expected that Southern railroads, manufacturing corporations, boards of trade, chambers of commerce and other trade and industrial organizations in States east of the Mississippi and south of the Ohio will promptly contribute to this enterprise and name their representatives to the meeting for organization. If the spirit that animated the convention was an index of the popular sentiment there will be no delay in putting this association into condition for effective work. One thing must be plainly understood at the outset. The South needs many more men of capital than it now has, whether that capital is in money, in intelligence or in skill in the mechanic arts. But it does not need mere muscle. There is enough unskilled labor for present requirements, and in all probability there will be for generations. The South has nappily escaped the evils attendant upon the employment of foreign laborers at the North. It will lend no aid to any who may wish to bring that element into its borders. None but those who have the ability to maintain themselves and to participate in the grand procession of progress and industrial development will be welcome. The South makes no war upon foreigners as such, but it

will object, and that most strenuously, to any attempt to foist upon it those who would from their first coming into it, be an irreparable injury to the communities among whom they might settle.

Some time since the MANUFACTURERS' RECORD directed attention to the large and augmenting immigration to the South from the Northwest, composed of thrifty American families who have become tired of living in communities composed in large measure of foreigners whose languages, customs and ideas have been brought from other lands. Those settlers from the Northwest are valuable additions to our population. They have money, capacity and character. They have found congenial neighbors and friends in their new homes. They are located near schools and churches in which instruction is given and God is worshipped in the English language. We want more such settlers. The South is the place for them, but not for the hordes who are coming by thousands weekly from European ports. We repeat, if those having the affairs of the Southern Immigration Society in charge will announce that their efforts will be directed solely to promoting the immigration of English speaking people, they will receive all the moral and material support they desire. If, on the other hand, they establish agencies on the European continent, and attempt to pour into the South the same classes of emigrants that have been landing in New York and Canada for the last fifteen years, they will be opposed by nine-tenths of the Southern people.

Trusting that wise counsels will prevail in the Association, the MANUFACTURERS' RECORD bids it God speed.

Increase of Postoffices South.

WASHINGTON, D. C., April 21, 1888.

Editor Manufacturers' Record:

The extent of Southern expansion in material matters has been practically shown in many ways recently—an expansion marvelous in its character and extent. Perhaps there is no more striking illustration of this than the postal statistics of the government afford. Taking the report of the Postoffice Department for 1886 we find that the 13 Southern States increased in the establishment of new postoffices the large number 1,340, while in 13 Northern and Western States taken at random the net increase was 236, or over 500 per cent. less than in the same number of Southern States. The significance of increase in postoffices is suggestive. It means growth in everything—people, intelligence and business.

These figures tell a striking tale of development:

1886.	Increase	1886.	Increase
South.	Postoffices.	North.	Postoffices.
Alabama.....	96	Connecticut.....	4
Florida.....	90	Illinois.....	41
Georgia.....	121	Indiana.....	23
Kentucky.....	85	Iowa.....	25
Louisiana.....	57	Maine.....	16
Maryland.....	65	Massachusetts.....	22
Mississippi.....	97	Michigan.....	44
North Carolina.....	193	New York.....	38
South Carolina.....	47	Ohio.....	33
Tennessee.....	70	Decrease.	
Texas.....	146	Arizona.....	6
Virginia.....	197	Colorado.....	16
West Virginia.....	75	Nevada.....	2
Wisconsin.....		Wisconsin.....	6
Increase 13 Southern States.....	1,340	Net increase 13 Northern and Western States.....	236
Excess Southern increase over 13 Northern States.....	1,104		

I. W. AVERY.

The Impending Crisis.

The Christian Secretary, published at Hartford, Conn., is the leading organ of the Baptist churches of New England. Its motto is the text—"What thou Seest, Write, and Send unto the Churches." Obeying the spirit of this precept of Holy Writ, this paper discusses temporal affairs in a Christian spirit. Whatever affects the temporal or spiritual welfare of mankind comes within its sphere of duty. Recently it has given much attention to questions of public economy, and, by its invitation, Professor Sumner, of Yale College, has presented at length those arguments in favor of free trade for which he has gained considerable notoriety, and Hon. N. D. Sperry, of New Haven, Conn., has set forth with a plainness that all can understand the advantages of protection. The first writer is a theorist who has derived his ideas from British text-books, in which, according to his belief, all economic wisdom is stored. The second is a man who, after receiving a common school education, learned a trade, and having been engaged for forty-four years in mechanical business, first as an employe, then as an employer, writes from the standpoint of the practical experience of an American artisan. The first paper was filled with ingenious sophistries, with conclusions from alleged but non-existent facts, and with those beautiful illusions, devised by British free-trade advocates, which are dispelled like a morning fog before the rising sun whenever the light of America's practical experiences is turned upon them. The second paper was "as plain as a pikestaff." Mr. Sperry is not a man of theories, but of facts hewn out from the solid rock of nearly half a century of experience. Before Professor Sumner was born Mr. Sperry was learning in the school of hard, useful work. From his early manhood he has been a man of affairs, and while never neglecting his own business, he always found time to acquire the knowledge that fitted him to be what he has been for a quarter of a century—the wise counsellor whose advice has been sought and acted upon by presidents and statesmen, and by the citizens of his native State. The Christian Secretary, seeing that the public mind was occupied with the great contest between protection and free trade which the President had opened by his message, wisely determined to invite the foremost advocates of each to write out their views, that it might present the subject fairly to its readers and give them the opportunity to weigh the arguments on either side and reach their own conclusions. That a religious, sectarian paper of high character and large circulation should adopt this course is an indication of the strong hold the questions involved in this discussion have upon the popular mind. Nothing like it has happened since

the controversy that began with the repeal of the Missouri Compromise and ended at Appomattox.

Before setting forth the advantages of protection Mr. Sperry defined the meanings of free trade and a "tariff for revenue only" as follows: Free trade is "the unrestricted interchange of commodities and products without custom house restrictions in form of duties." The second is "an indiscriminate tariff sufficient to raise the necessary revenues for carrying on the government." This last definition he obtained from a prominent advocate of "a tariff for revenue only," who further explained his meaning by saying, "I want to kill off all articles made or produced in this country that can't stand without help or aid of a tariff." When Mr. Sperry told him that such a policy would "destroy one-half of the manufacturing establishments in the State, and would destroy its farming interests as well; that it would destroy the capital invested and turn thousands out of employment unless they would work at the same prices as mechanics and laborers do abroad," his friend replied: "That is just what I want. Wages are too high in this country, and the prices of wages have got to come down on a par with the laborers and mechanics abroad." In opposition to these views protectionists "believe in a tariff that will protect our own industries, whether they are farm products, or products of the factory or of any other labor, against foreign products and foreign competition. Only on such articles or products as need protection should duties be levied. All articles which we cannot produce in the United States should come into our ports duty free. Should we arrive at a point in due time, by our own inventive skill (which protection has stimulated), by improved machinery or otherwise, that articles can be produced in this country in spite of foreign competition or hostile combinations of foreign capital, such articles should be placed upon the free list."

In the foregoing the differences of thought and motive between those who favor protection and those who advocate free trade (either by direct or by indirect means) are more clearly and succinctly stated than they have been in our day. Stripped of all the flimsy trappings that political partisans of either side have draped around and upon these vital questions the issues stand before us. Which will the American people take? Shall it be protection, which, while assuring sufficient revenue to meet all the expenses of the government, at the same time assures the progress and prosperity of every section and of every industry; or shall it be free trade, which at a blow destroys every industry; or shall it be "a tariff for revenue only," which insidiously, but no less effectively, will lead to the same unhappy result? These are

questions that must be met and answered promptly. A presidential election is impending. Congress has these matters under consideration. Partisans on either side are thinking of them from the standpoint of their own ambitions and aspirations. The dominant party in the lower house, under the guidance of ambitious leaders, seems to be drifting towards the support of a bill that, if it became a law, would be the worst possible form of "a tariff for revenue only," and, as some of its leading supporters admit, it is intended for an entering wedge to split protection and prepare the way for free trade.

From the partisans in Congress the MANUFACTURERS' RECORD appeals to the business men of the South. Now is the time for them to show their strength and their business forecast. Send delegations to your Congressmen and tell them that the passage of the "Mills Bill" means ruin to Southern industry and progress. Let no uncertain sound go forth. The vast, the almost immeasurable progress of our Southland may be stopped by the passage of this foolish measure. The business men of the South can put an end to this miserable folly in a day if they will, but they have no time to lose. The place to stop it is in the House of Representatives. No member of that body, unless he is a theoretical crank or doctrinaire, will fail to respond to the wishes of his constituents. There is no pessimism in the MANUFACTURERS' RECORD. It believes in the South standing where it can look down upon the situation without any intervening political dust to hide any part of the view. The MANUFACTURERS' RECORD solemnly avows its belief that a crisis is impending, on the determination of which the future for good or for evil of the South and of the nation depends. The time for action has come.

Southern Investments Now the Fashion.

Messrs. Cordly & Co., bankers, of Boston, in their weekly circular have the following good words to say of the increasing interest in Southern investments, based on the growing prosperity of that section:

Though all the vicissitudes of the past months, in which the Western roads have been suffering for lack of traffic and fighting among themselves—"Satan finds some mischief still for idle hands to do"—the Southern roads and the Southern country generally have been prospering, and are attracting more and more the favorable attention of investors. For a long time back we have been calling attention to the Southern field, but the attention of the New England investment public has been so closely centered on the West and Northwest that the capitalists of New York and Pennsylvania (and even the smaller ones of the Middle Western States, such as Michigan, Ohio and Illinois) have done the pioneering in the South, and have reaped some very large profits. There have been a few syndicates of New England men who have taken hold, but they could be counted on the fingers of one hand. There are still profits enough remaining, and it begins to look as though the face of fashion

in New England investment would soon be turned southward, and as fashion governs, even in investment matters, we may look to see a very large amount of money previously headed West directed to the South.

The Louisville & Nashville Railroad is perhaps as typically Southern, and as fair an example of the prosperity there as can be selected. The Alabama section of that road has for a good portion of the past year been crowded beyond the capacity of a single track, and is putting in numerous long stretches of side tracks in such position that they can be utilized in double-tracking. An incident coming under our observation illustrates the crowded condition of this line. At Montgomery, Ala., one of the principal stations, there were two or three weeks last fall when the only steam coal in the city was that in the coal-houses of the Capital City Water Co. This company had anticipated a possible coal famine, and had collected coal from time to time whenever it could obtain it, and as a result was enabled to run its works continuously, and at the same time supply coal to others, who were willing to pay large prices for it, and who, unless they had been able to thus obtain it, would have had to shut down for quite a period. The same circumstances prevailed in other parts of the State, and quite recently manufacturers have been obliged to wait for long periods of a week or ten days or more for material which was on the cars and in the hands of the railroads, but which could not be delivered to them on account of the crush of business at junction and transfer points.

(Special correspondence MANUFACTURERS' RECORD.)
MOUNTAIN PARK HOTEL,
HOT SPRINGS, N. C., April 27, 1888.

This house is rightly named, for if there is such a thing nowhere else in the world as a park in the midst of mountains, there is one here that for beauty and attractiveness cannot be surpassed. Artists have pictured it, writers described it, but none have done it justice, and no one ever will. It is one of nature's gems. Art can imitate the diamond and all other precious stones, but no human power can carve out in the mountains or build up in the valleys a scene at all comparing with this that surrounds me. But human skill, guided by true taste, can so harmonize man's work with that of nature as to add to the beauty of each, and that is what has been done at Mountain Park. This hotel, in location, in architecture and in coloring, is in perfect harmony with its surroundings. Even the tennis court seems to be an appropriate detail. That the house is admirably kept goes without saying. The gem would be of little value if there were a flaw in its center. If there is one I have yet to discover it, after having been here three days. The comforts of a refined home and the freedom from care of hotel life are so exquisitely blended by the deft management of Landlord Judd and his lieutenants that nothing is required. Then the hot natural baths! After luxuriating in those marble basins and feeling all rheumatic twinges take their flight, and a sense of rest and comfort stealing over me that I have not had in many months, your correspondent feels much of the spirit of the afflicted Edinburghers, who scratch themselves against the corner posts he erected for the comfort of his people, while they exclaim, "God bless the good Duke of Argyle." "So say we all of us" who make this hotel our temporary home, "God bless whoever built these baths around the Hot Springs."

The trip from Baltimore to this place is a pleasurable one at this season in spite of the numerous stops and waits, the longest of which is at Morristown. The country east of Bristol, Tenn., is a week later than it is after you have passed that city. On all my route I was impressed with the fine appearance of winter wheat. The stand is heavy and promises a fine harvest.

The two towns on this line that give to the observant traveler the best ocular evidences of tangible prosperity are Johnson City and Morristown. The first must have gained, judging by the new buildings observable from the rear car platform, fully 125 per cent. of new business houses and new

dwellings. The second has doubled its population since 1880, and a little more. If all that meet the eyes are reliable evidences, then I should say that Johnson City is bound to be the great town of the future on the East Tennessee, Virginia & Georgia Railroad in Tennessee.

The convention here was a success in all respects. Its members left inspired with the conviction that they had done a glorious work for the South. As the Associated and the United Press had each representatives in attendance, I will not trouble you by repeating news that has been read by every one of your subscribers that take the daily papers. Summarized, the work of the convention was: 1st. To adopt a system of organization; 2d. To determine upon a plan for raising ample funds for the work; 3d. To arrange for the putting of those suggestions before friendly corporations and individuals, and to solicit their co-operation and their subscriptions. The question is now settled definitely. The meeting will be held in New York City, July 2. An organization will be effected, and after that practical work will begin. B. S. P.

Some Suggestive Facts.

A Splendid Agricultural Country,
Where People Live on West-
ern Butter, Beef, Cheese
and Milk.

A Change Needed.

JASPER, TENN., April 28, 1888.

Editor Manufacturers' Record:

In your very valuable paper I notice almost every kind of industry mentioned as being profitably carried on in the South. I will add that the South, and particularly the table-lands of Marion county, Tennessee, are well adapted to the production of all the grasses and clovers, which are the foundation of beef, mutton and rich milk, which are the foundation of butter and cheese. These lands are underlaid with iron, coal, marble, lead, and perhaps other valuable minerals, besides lime and marble in inexhaustible quantities. The iron and coal is being worked, employing thousands of hands, who consume both butter and cheese, together with the milk, beef and mutton, much of which is shipped into the country from abroad by the retail merchants. There are hundreds of pounds of cheese consumed and not an ounce made in the county of Marion. South Pittsburg, with its three furnaces, its foundries, pipe works, hoe and tool works, stove works, brick and terra cotta works, two saw and planing mills and its 4,000 inhabitants, buys all the butter, cheese and condensed milk it uses from the North or some other point. Jasper, the county seat, with its 1,000 inhabitants, imports butter, cheese, lard, flour, meal, pork, etc., when there is not a better stock-raising section under the sun than Marion county. Mont Eagle, the great Southern Chautauqua of the South, where thousands congregate annually for health and pleasure, are fed on butter, beef and cheese raised in some Northern or Western territory. Inman, where there are thousands of tons of iron ore mined annually, is fed on Northern cheese, etc. Victoria, Whitwell, Etna, Coal City, Wallview and other mining villages are fed on Northern and Western butter and cheese minus the milk, unless it is brought on in cans condensed. All these places are inside of Marion county except Coal City, which is near the line. Tracy City is within three miles of Marion county line and is a mining town of 3,500 or 4,000 inhabitants that eat butter, cheese and beef manufactured in some other country. We can work 365 days in the year, except leap year, when we can put in 366 if we want to. Cattle require very little shelter during winter.

There are plenty of farm lands for sale at from two to ten dollars per acre on the mountain that will produce grass or clover. Why not some enterprising Yankee or native utilize it by establishing a dairy and making butter, cheese and milk for sale?

AMOS L. GRIFFITH.

Mississippi Notes.

Agricultural and Manufacturing Items.

(Special correspondence MANUFACTURERS' RECORD.)

ABERDEEN, MISS., April 28, 1888.

The Mississippi Colored Fair Association, composed of a number of leading colored men, propose holding a fair at Brookhaven, commencing on October 16 and continuing five days.

The bill introduced in the senate by Senator Walthall, of Mississippi, in compliance with joint resolution of the legislature of the State, asking that all public lands in Mississippi be withdrawn from sale at private entry and reserved for occupation under the homestead act, is creating quite a stir among lumbermen, as these lands are almost exclusively in the forest regions of South Mississippi, and represent the densest and finest areas of yellow pine in the Union, growing in districts well supplied with fine logging streams, and accessible to railroads already built, in course of construction or projected. The result is that there is a general rush for their possession, for all realize that the withdrawal of the public lands will be the signal for a general advance in the price of private holdings, and that these grand timber tracts must very soon command \$15 or \$30 an acre.

The Mississippi & Tennessee Iron & Manufacturing Co. will on May 1st offer a number of desirable town lots for sale at Duck Hill, Miss., on the Illinois Central Railroad, 112 miles south of Memphis. The company has established manufacturing facilities of tiles and fire-bricks in the vicinity, and owns in that neighborhood an immense tract of as high grade limonite iron ore as can be found in the South, and is now inviting bids for the establishment of charcoal and coke furnaces.

Mr. Robert Gibson, one of the most energetic and successful cotton planters in Lowndes county, has established a creamery upon his farm about seven miles west of Columbus, and is now shipping nearly two hundred pounds of butter a week to the manufacturing and mining city of Birmingham, Alabama.

Clay county on the 14th inst. voted a donation of \$100,000 to the Memphis, Oxford & Columbus road, and \$40,000 to the Georgia Pacific road; West Point, the county seat of Clay county, on the same day voted a donation of \$50,000 to the Georgia Pacific road.

Messrs. Salvo & Berdon, of Natchez, have established a bottling factory in that city, and are doing a flourishing business. The output of this establishment is between five and six thousand bottles a day, and the demand for their goods is fully up to the supply.

The earnings of the New Orleans & Northern Railroad, which is the Mississippi division of the Queen and Crescent system, for the month of February, 1888, amounted to \$19,492.92, against \$14,486.99 for corresponding month in 1887.

A great deal of real estate has changed hands within the last three weeks at Bay St. Louis, and the other beautiful watering place towns on the South Mississippi coast. It is very evident that the people of our State and New Orleans are not much longer to enjoy a monopoly of the summer bathing, fishing and driving, and the winter comfort that this charming coast affords to the pleasure-seeker and the invalid.

Oayka, in Pike county, is keeping up with the procession in the matter of exporting vegetables: she shipped 8,000 bushels of green peas to the North and West last week, chiefly to Chicago and St. Louis.

Bollivar county votes on the 8th of May

on the question of accepting a proposition from the Louisville, New Orleans & Texas Railroad Co., to build what is termed the Loop Line through the county, in consideration of Bolivar taking \$150,000 in stock.

Greenville's receipts of cotton this season, up to April 14th, amounted to 52,416 bales.

Port Gibson, in Claiborne county, is advancing rapidly in population, and there as in almost all of the other towns of the State, the demand is for more dwelling houses.

The Mississippi Dental Association will hold its annual meeting at Grenada on the 3d Monday in May.

The cotton factory at Port Gibson is now completed and in full operation, and last week made shipments on orders to California. No factory in the South has started under more encouraging auspices.

The greatest interest is being manifested by the people of the entire State in the immigration convention called by Gov. Lowry to assemble at Jackson on the 24th of May. It is expected that every county will be represented by a large and influential delegation, and many visitors are expected to be present from the West.

Meridian has 25 manufacturing establishments with aggregate capital of \$405,000, giving employment to 495 hands. In addition to these the shops of the Queen & Crescent Railroad system in that city employ 300 hands.

Meridian reports 1,300 pupils in attendance upon her public schools—800 white and 500 colored—and 625 pupils in her private schools.

The shipments of lumber by sea from the Port of Pascagoula on our Mississippi south coast for the week ending April 19 were as follows:

	Feet.
For Liverpool.....	67,534
" "	73,344
" "	795,541
" London.....	497,733
" Horwich, Eng.....	381,877
" Wilmington, Del.....	434,000
" Key West, Fla.....	84,000
Total for week.....	3,551,538

Cotton is King and Always Will Be.

Theorists may write or say what they please, but still the fact is apparent that the South must rely for supremacy and permanent prosperity upon the cotton crop, her chief money crop, and that cotton is king is each day becoming more apparent to those who study the resources and industries of our continent and the competing world.

The aim of our people should be to make this great staple their surplus crop to as great an extent as possible; in other words, to use every endeavor to make the cotton plantation entirely self sustaining in the way of food supplies, as was generally the case before the war, and as is the case in thousands of instances in the South now. When this end is reached the cotton makers will be the masters of the situation, and the most independent and prosperous people in the world; for the effort to make food supplies must inevitably culminate in making food surplus, as all know who have memories long enough to reach back to 1860, when almost every cotton planter in this great Mississippi prairie was a meat seller, and every one of them made more corn than he could feed or consume, and most of them raised their own horses and many of their mules, while great herds of fine cattle and sheep were rather the general rule than the exception.

We are the friend of every industry, great or small, that can contribute to the general good by benefiting the individual who manages it, and we are anxious that agriculture, horticulture, stock growing, lumbering, dairying, manufacturing, hay making and every other occupation known to civilized man shall find its champions and successful devotees in this grand old Commonwealth, but we never want to see the day when Mississippi shall make less than a million of bales of cotton a year, and hope to live until she doubles that number if the demands of the world are equal to the increase. With cotton to offer, we can command the world's gold for all time, though there may come many times like the present when the demand for wheat and pork and other Western staples finds a limit local to this continent.—Aberdeen (Miss.) Examiner.

Improved Self-Feed Saw Table.

This cut represents the latest improved self-feed saw table of the Williamsport Machine Co., to take the place of the common rip saw table, doing all kinds of ripping in planing mills, sash, door and furniture factories, &c. The machine is made of iron and steel, except the table, which is made of alternate strips of ash and cherry glued together in the best manner, making a very solid table. The feed is a spur wheel made of steel, and is arranged over the piece being ripped and in line with the saw, so that the mark made by the feed

tional adjustment at the link, where the lever is attached to the gauge, to allow sawing strong or scant sizes.

The machine is made, the manufacturers say, throughout from entire new patterns, of new designs, in the best manner and of the best material.

They have also a siding attachment for these machines, which is easy to put on, which makes it possible to saw as much

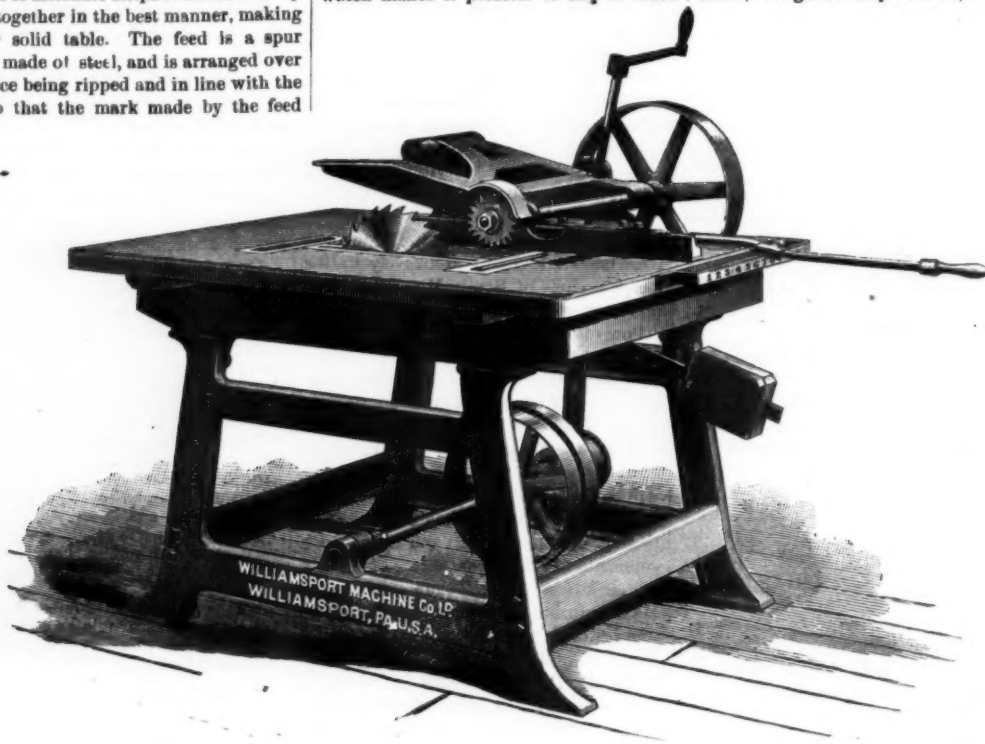
nals from a solid piece of steel, and are slotted on all four sides. All gears are cast from iron cut patterns. It is especially designed for flooring and ceiling and similar work, and is a light running, rapid and very satisfactory machine. It has all their special improvements, viz: variable feed, by which the feed is regulated to any speed instantly without stopping the machine; weighted chip-breaker, for main-

States standard sizes. Everything is substantially and durably constructed for long and efficient service. The Glen Cove Machine Co. Limited, 24 to 30 Clay street, Brooklyn, N. Y., will give any further particulars desired.

A Great Railroad System.

The East Tennessee, Virginia & Georgia Railway is one of the most important and efficiently managed railway systems of the South. It started many years ago as a small local road in East Tennessee, but has grown steadily by the construction of new lines or purchase and leasing of connecting lines till the system comprises some 2,000 miles of road. The headquarters and principal offices of this system are at Knoxville, Tenn. The main line runs 340 miles from Chattanooga northeasterly, via Knoxville, to Bristol, near the extreme northeasterly corner of Tennessee. There it connects with the Norfolk & Western Railway and affords through lines to Norfolk, and to Philadelphia and New York by the beautiful Shenandoah Valley from Roanoke. There are also branches from the main line from Knoxville to Jellico, where connection is made with the Louisville & Nashville system for Louisville, Ky., and Cincinnati, O.; and from Morristown to Paint Rock, N. C., where it connects with the Western, of North Carolina. Westward from Chattanooga this system has the shortest line to Memphis and all points in Arkansas and Texas. The Georgia branch starts from Chattanooga via Rome, Atlanta and Macon, to Brunswick, on the Atlantic. At Jesup, forty-two miles west of Brunswick, this line connects with the Savannah, Florida & Western, and is the shortest line to Jacksonville, Fla., and to the orange groves of the land of flowers. The Alabama branch starts from Rome on the Georgia line, and runs to Meridian, where it connects with the Vicksburg & Meridian, and via Shreveport has another route to Texas.

One of the latest enterprises of the East Tennessee, Virginia & Georgia system is the Mobile & Birmingham Division, a line of 150 miles, by which direct communication is established with the growing port of Mobile, Ala., for the coal and iron pro-



IMPROVED SELF-FEED SAW TABLE.

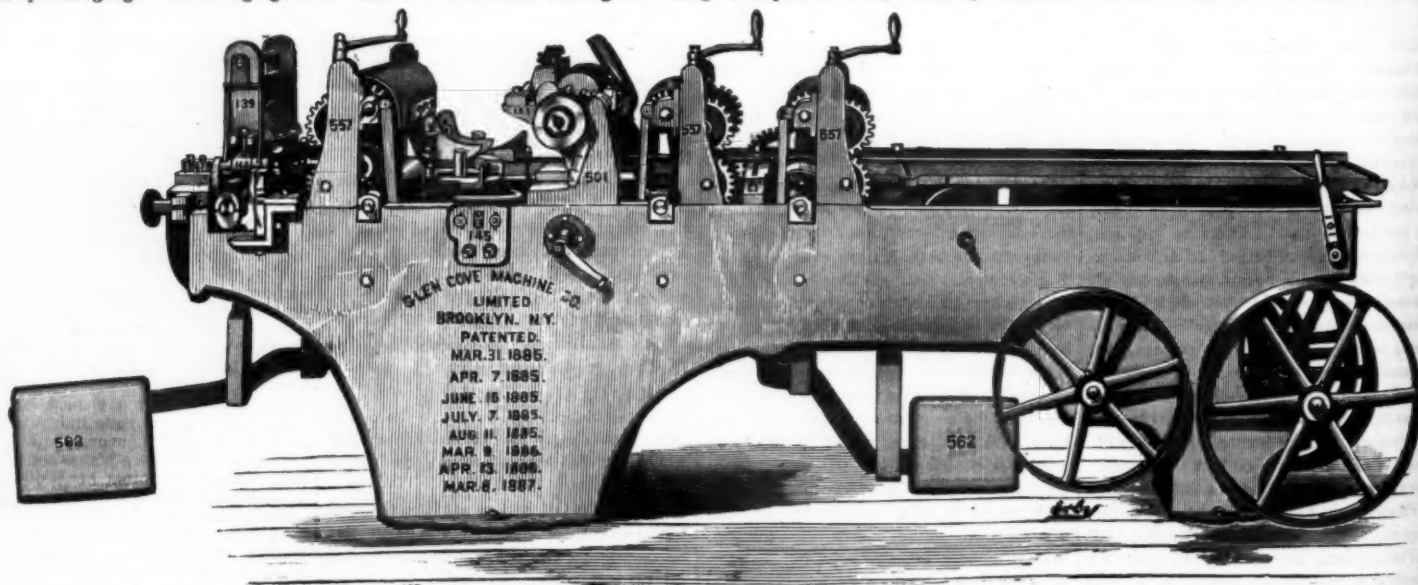
wheel is taken out by the cut of the saw. It is driven by an endless belt running from the countershaft below, which is supplied with a swing tightener that answers a double purpose: first, by keeping the endless feed belt always tight, and also for starting and stopping the feed works. The spur wheel is also cut around, compelling the piece being ripped to press close up to the gauge. The swinging frame

bevel siding as on a regular re-saw. The Williamsport Machine Co., Limited, Williamsport, Pa., are the manufacturers, and will give any information desired.

No. 4 Fast Feed Flooring and Ceiling Machine.

The accompanying engraving illustrates the new No. 4 fast feed flooring and ceiling

taining an even, steady pressure against the edge of the board by which splitting and tearing the lumber is prevented; new hoisting work; parallel raising of the rolls, by which contact of the rolls across the whole surface of the board is secured; revolving the expansion gear shafts in boxes, so that they can be oiled at any time while the machine is running; side head pressure-bars, to insure perfect match-



NO. 4 FAST FEED FLOORING AND CEILING MACHINE.

is self-adjusting, and readily adjusts itself to the different thicknesses being sawed. The frame is also hinged, which allows it to be turned up out of the way, and by means of the crank, shown in cut, the frame can be held up.

The set works are the latest improved, and consist of gauge, lever, link and graduated scale, which is graduated by $\frac{1}{4}$ inches, allowing the operator to saw from $\frac{1}{4}$ inch to 13 inches wide. There is also an addi-

machine constructed by the Glen Cove Machine Co., of Brooklyn, N. Y. They build it in two sizes, 14 inches and 24 inches wide, weighing respectively 6,000 and 8,800 pounds. Each machine will match to its full rated width and will plane up to 4 inches thick.

The frame is heavy, and every joint is planed and solidly fitted together. All the shafting is of steel. The top and bottom heads are each forged with their jour-

ing; adjustable oil steps for side spindles, with ring attachment to secure cool and steady running; gripping device to side head frames; set works to top and side heads; improved expansion gears; yoking the cutter-head boxes together to prevent their getting out of line.

Every part or piece is numbered, so that in ordering a duplicate it is only necessary to state the number by letter or by wire. All shafts and fittings, including bolts, nuts and screws, are finished to United

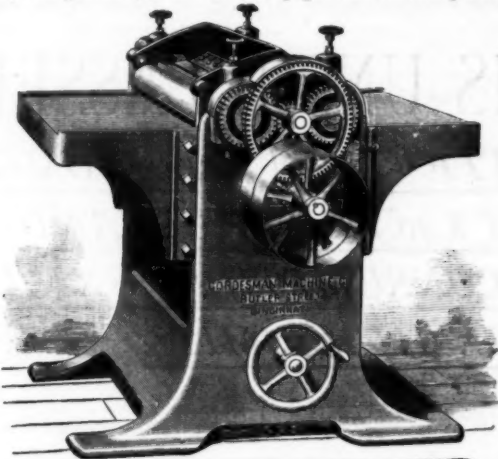
ducts of the mineral regions of Alabama and Tennessee. Other new lines are contemplated and some under construction which will further add to the importance of the system and the convenience of the traveling public. The roadbed of the line is in good condition, most of it ballasted with stone; the trains travel fast and rarely fail to come in on schedule time, and the officers and employees of the road are uniformly courteous to all who may be occasion to travel on the lines of the East Tennessee, Virginia & Georgia.

Pony Surface Planing Machine

This cut is an accurate representation of the smallest planer made by the Cordesman Machine Co., and will commend itself to all wood workers, by its weight, strength and compactness; it is built by skilled mechanics, and the very best material is used; it takes but a little power to drive it, and is a first class machine at a very moderate price. For planing mills, bracket, buggy, furniture, panel and cigar factories it is a very valuable machine.

The frame, with cylinder and roller boxes, is cast in one piece, being best adapted for strength and strain, also preventing the possibility of its getting out of shape in shipping, and if not carefully levelled on floor. The bed is cast in one piece, the table being solid and so constructed as to produce work which is perfectly true and smooth. It has planed ways fourteen inches long, and is fitted to the outside of main frame, securely fastened by adjustable gibs, so that all wear can be taken up, and also preventing the table from becoming shaky by the action of feed rolls, and from the weight and jar of lumber thrown upon it while the machine is in motion. The bed raises and lowers by means of a hand wheel. An index is conveniently placed on side of machine so that the bed can be adjusted to suit any thickness of lumber up to seven inches.

The cylinder, with journals, is made of a



PONY SURFACE PLANING MACHINE.

solid cast steel forging, perfectly fitted and accurately balanced, and is provided with patent self-oiling boxes, lined with genuine Babbitt metal. The two adjusting pressure bars (one on each side of cylinder) are placed very near to the cut, and will yield to the inequalities in the surface of lumber, so that pieces six inches or less in length can be planed with perfect accuracy.

The two upper feed rolls are made of forged steel, and are three inches in diameter. These rolls are driven with reliable gearing, and given pressure by strong steel coiled springs, which can be adjusted by hand-wheels conveniently placed on top of machine. The two lower adjustable feed rolls are also made of forged steel, and are three inches in diameter. The feed rolls are well made and intended for a strong feed.

This company build two sizes of pony planers, both being of this design. This one will plane lumber eighteen and one-fourth inches wide, and the other will plane lumber twenty-four and one-fourth inches wide, thus making it a little larger and heavier. Either machine will plane hard or soft wood of any thickness up to seven inches.

A countershaft is furnished with each machine, and it can be bolted above or below floor, just as purchaser desires it. The countershaft has a flange pulley on it which drives tight and loose feed pulleys on machine, so that the feed can be stopped or started while machine is in motion. The tight and loose pulleys on

countershaft are 10x5 1/2 inch face, and should make 1,050 revolutions per minute. The manufacturers are the Cordesman Machine Co., Cincinnati, Ohio

No. 4 Double Cylinder Planer and Matcher.

We illustrate herewith a new double cylinder planer and matcher, designed for general planing and matching in either hard or soft wood, and has many advantages for doing smooth and perfect work. It is adapted for doing custom work—general planing and smoothing, making flooring, ceiling, partition stuff, patent siding, casing, molding, etc., and will stand up to hard work day in and day out without breaking down or causing the operator trouble. All the parts are easily got at and the adjustments are claimed to be perfect. It does a large range of work, planing 24 inches wide, both sides, and up to six inches thick, and will match or edge up stuff 14 inches wide.

The frame is very substantial, the sides being cast with internal braces, making a very strong framing.

Both upper and lower cylinders are of steel, slotted on all four sides, so that all kinds of knives used in general planing mill work, such as beading, patent siding and molding bits, can be placed on them in any position that may be desired. Both

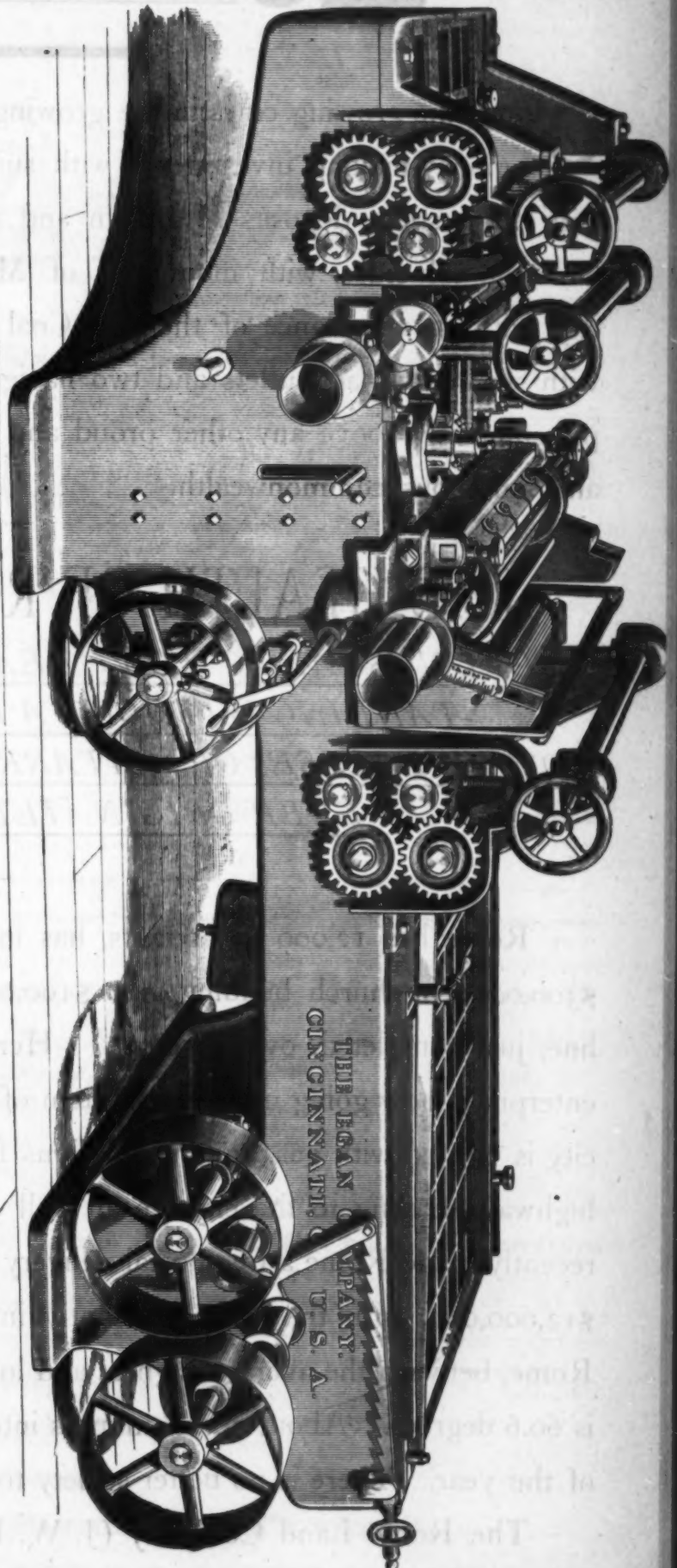
The last pair of rolls feed the stock clear out of the machine. This will be found an advantageous arrangement, as very often the last piece is spoiled by pulling it out of the machine.

The patent pressure bars come close up to the knives on each side of the cylinder, insuring smooth work, as they prevent all chipping out. The means of adjusting them to or from the knives is simple and

which holds down the stock to the lower cylinder. The beading heads have both a vertical and horizontal adjustment, and the the housing being hinged, the beader can be instantly lifted out of the way.

The manufacturers say "the machine is reliable in every particular, and will give general satisfaction to mill men desiring an efficient and durable machine; one that is simple in its construction and adjustment,

NO. 4 DOUBLE CYLINDER PLANNER AND MATCHER.



cylinders are double belted and run in long self oiling bearings. The lower cylinder is placed inside the last pair of feed rolls. This will be found a great advantage, as the work is fed entirely through the machine, dispensing with pulling out the last piece. The saddle or bearing for the top cutter head is fitted to very heavy planed housings and is adjusted from below the bed plate, giving free access to the cylinder in order to reset or sharpen the knives.

The side heads are of gun metal and run on heavy steel spindles, which are babbitted on strong yoke frames. They can be adjusted from the working side of the machine, and so placed as to feed the flooring over any part of the table, insuring an equal wear on the bed. The side heads are fitted with patent drop matcher attachment, by means of which they can be instantly dropped below the surface of the bed by a lever from the working end of the machine, in order to surface the full width of 24 inches. A patent matcher clip for breaking the chips is attached to the heads and works on the same circle of the cutting edge, preventing all tearing out of chips or broken edges.

The feed is very powerful and consists of four 6-inch feed rolls strongly geared; the top rolls are driven with improved expansion gearing and fitted with patent swiveling boxes, which allows the rolls to lift at either end without cramping or bending the raising screws. These swiveling boxes are connected to slides working on planed ways of the housings, and each roll is raised and lowered by a parallel shaft and hand-wheel to operate the screws.

very convenient to the operator, and are made to accommodate any kind of bits. The bonnet, which is heavy, has an extension which comes down on the board being planed, holding it very solid as it is fed to the cutter head.

The beader is entirely independent, being connected to the pressure foot housing,

and one that will not easily get out of order. For general work it cannot be surpassed by any machine of its weight and price, as it has all the very latest improvements."

For further information address the manufacturers, The Egan Co., 238 to 248 West Front street, Cincinnati, Ohio.

ROME, GA.

OF all the growing cities in the growing South, Rome presents the greatest opening for money-making investments, with surrounding fields as rich as the lands of Goshen, with exhaustless deposits of brown and red Iron Ores and Manganese immediately at hand on all sides, with mountains of Marble and Limestone coming right up to the city, with an abundance of the best Coal easy of access, areas of untouched forests and with seven railroad outlets and two navigable rivers, Rome stands, in natural advantages, pre-eminently above any other proud and pretentious city within the limits of this proud and ambitious commonwealth.

THE HEALTH OF ROME IS UNSURPASSED.

*THE UNUSUALLY LOW DEATH RATE IS A PHENOMENON,
STANDING WITHOUT A PEER AT 8.40 PER THOUSAND.
NOT ONE CASE OF CATARRH OR CONSUMPTION EXISTS OR
EVER ORIGINATED WITHIN HER LIMITS.*

Rome has 12,000 inhabitants, has invested in colleges and school buildings about \$300,000; in church building over \$100,000; in her new hotel \$125,000; in the dummy line, just completed, over \$50,000. Her manufactories employ 800 hands, with other enterprises now going up. Her system of water-works and sewerage is unsurpassed. The city is lighted with gas, and negotiations for an electric light plant are now pending. The highways leading to the city are all well macadamized. The Post-office Department has recently made Rome a free postal delivery office. The annual business of the city is about \$12,000,000, with the trade constantly increasing. The yearly range of temperature at Rome, between the average highest and lowest, is about 84 degrees; the mean temperature is 60.6 degrees. About seven months intervene between the first and the last killing frosts of the year. There is no better society to be found anywhere.

The Rome Land Company (J. W. Rounsaville, President, T. F. Howell, Treasurer, and J. L. Bass, Secretary and Business Manager) will donate ample grounds to, and otherwise aid, any worthy manufacturing enterprise that may locate here.

Send for circulars and pamphlets.

GADSDEN, ALA.

"The Hub of the Mineral Belt."

— ONLY —

IRON AND COAL

City in Alabama with River Transportation.

THE GADSDEN LAND AND IMPROVEMENT CO.

Own large tract of Eligibly Located Residence Property in the Most Desirable Part of the City, and have fine location on river and railroad for

MANUFACTURING ESTABLISHMENTS,

And are offering great inducements to manufacturers to locate their plants in this FAVORED LOCALITY. No place in the South has such Wonderful Advantages. Situated in the midst of the RICHEST IRON SECTION in the State, at the foot of Lookout Mountain on the banks of a Navigable River (THE BEAUTIFUL COOSA), surrounded by Forests of the Finest Timber on the Continent, with Fine Building and Fire Clay, and the FINEST BUILDING STONE all around us, with

Uninterrupted Health, and the Purest and Best Water, and Finest Drainage of any City in the State,

Gadsden should become the

GREATEST MANUFACTURING CENTER OF ALABAMA.

The Alabama Great Southern, Rome & Decatur, Tennessee & Coosa, Anniston & Cincinnati Railroads, with the ever flowing Coosa, navigable the year round, gives us as *FINE TRANSPORTATION FACILITIES* as any other city enjoys.

We now have Railroad Car Works, Furnaces, Foundry and Machine Works, Saw Mills, Sash, Door and Blind Factory, Furniture Factory, Ice Factory, Paint Mills, Grist and Flouring Mills, Cotton Ginnery, Fine System of Water Works, Electric Lights, Telephone Communication over City, and also to neighboring cities, Atlanta and Rome, Ga.

WE WANT Rolling Mills, Bridge and Bolt Works, Cotton Factories, Woolen Mills, Furniture Factories, in fact all kinds of Factories, even Coffin Factories, (but we want to ship the Coffins to some of the other booming cities.

Liberal Grants of Land will be made by THE GADSDEN LAND & IMPROVEMENT Co., to any of the above-named industries.

FOR FURTHER PARTICULARS ADDRESS

M. L. FOSTER, Sec. & Treas.

THE GADSDEN LAND & IMPROVEMENT CO.

Post-Office Box 145.

GADSDEN, ALABAMA.

ALABAMA'S GREAT MINERAL WEALTH

SURROUNDS THE

★ CITY OF TALLADEGA, ★

Which, according to statistics, is the **MOST HEALTHFUL CITY IN ALABAMA**, and the **County Seat of Talladega County.**

THE CITY HAS A POPULATION OF 5,000, AND ITS POPULATION IS RAPIDLY INCREASING.

TALLADEGA is on the main line of the E. T. V. & G. Railroad, the A. & A. Railroad, and is the present terminus of the T. & C. Railroad. Work is rapidly progressing on the Birmingham & Savannah Air Line Road, between Birmingham and Savannah, and within twelve months this road will be completed via Talladega from Birmingham to Savannah, which will place Talladega on the direct line from Birmingham to deep water on the Atlantic, making

TALLADEGA ONE OF THE BEST DISTRIBUTING POINTS IN THE STATE.

THE CITY HAS

AN EXCELLENT SYSTEM OF COMMON GRADED SCHOOLS,

With a scholastic population of 500, and **THE MOST COMMODIOUS AND ATTRACTIVE PUBLIC SCHOOL BUILDING IN THE STATE.** The main building is a three-story brick, slate roof structure, well ventilated, heated by steam; has accommodations and seating capacity for 500 pupils. This school is owned and sustained by the city. All branches of English literature, foreign languages, music, the sciences and art, are taught for a nominal tuition. Among other educational institutions are the following:

SYNODICAL FEMALE INSTITUTE, Property valued at \$50,000.

D. D. & B. INSTITUTE, Property valued at \$150,000.

BLIND INSTITUTE, (in course of construction,) property valued at \$150,000.

FOSTER COLLEGE, property valued at \$150,000.

No other city in Alabama has so many educational institutions and so many public buildings.

← TALLADEGA HAS THE MOST COMPLETE SYSTEM OF WATER WORKS IN THE STATE. →

The stand pipe has a capacity of 175,000 gallons, and into this reservoir a supply of fresh, clear, pure water is pumped every day from a large spring located in the heart of the city, which discharges over 2,000,000 gallons per day. The gravity pressure from this system is 90 pounds to the square inch in the business portion of the city. The city has broad streets, well macadamized and shaded with beautiful trees, and is well lighted with a **SUPERIOR QUALITY OF GAS**. Sixty fire plugs and forty gas lamps protect against fire and illuminate the streets.

A LARGE FURNACE PLANT gives employment to thousands of hands, and makes a high grade of chilled car-wheel iron from ores, limestone and coal within ten minutes haul by rail, or an hour's haul by wagon. **FOUR LARGE LUMBER MILLS**, with an aggregate daily capacity of 200,000 feet of lumber, cut from the long-leaved yellow Pine of this country. **FOUR BRICK YARDS** are in active operation. A **SASH, DOOR and BLIND FACTORY**, a **FOUNDRY, MACHINE SHOP, FLOUR MILL, COTTON-SEED OIL MILL**, and various other industries are in successful operation, and the **TALLADEGA ICE CO.** cools the thrifty population with pure ice at 50 cents per hundred. Another large furnace plant will be completed within the next ten months. A **Spoke and Handle Factory** and many other industries are projected, with a view to early completion.

Taxable property has increased 100 per cent. within the past twelve months. The rate of taxation is limited in the city charter to half of one per cent., and the city offers an exemption from taxation to all manufacturing enterprises for a period of ten years. The county of Talladega supplies more crude material, in the way of minerals and timber, than any other county in the State. Almost within the corporate limits of the city are extensive deposits of the highest grades of limonite ores, yielding 50 to 58 per cent. metallic iron, with only a trace of phosphorus, and limestone abounds in the greatest abundance. Coal is within twenty miles by rail.

THE TALLADEGA LAND & IMPROVEMENT CO. owns 5,000 lots suitable for residences, business and manufacturing, in and adjacent to the city. Lots are donated to manufacturing enterprises, and liberal inducements offered to actual settlers. **SPRING LAKE PARK** is owned by this company, and it is being made the most attractive resort in the State. The lake covers an area of seven acres, and is a beautiful sheet of clear spring water. Parties seeking a healthy climate, free from malaria and epidemics, and a prosperous city, are invited to visit Talladega. Address for maps, etc.

The Talladega Land & Improvement Co., **Talladega, Ala.**

SHEFFIELD, Colbert County, Ala.

The Iron Manufacturing Center of the South.

BEING at the head of navigation, and on the south bank of the Tennessee river, Sheffield is the natural outlet for the mineral and manufacturing products of Alabama and neighboring States seeking a water route to points on the Ohio and Mississippi rivers, and to the Gulf of Mexico, as well as the best distributing point over Alabama, Eastern Mississippi and East Tennessee, South Carolina, Georgia and Florida for Northern and Western produce, groceries, provisions, machinery, &c. Four railroads certain, and several others assured. Principal shops of Memphis & Charleston Railroad will be erected here pursuant to written contract. These will employ between four hundred and five hundred mechanics, and consequently, with their families, will make an increase in population of at least two thousand people. Shops of three other railroads are contracted to be located here.

Five Blast Furnaces Now Under Construction,

Of which one is nearly finished, and the remaining four contracted to completion next spring, have estimated capacity of 700 tons pig iron per day. This is 40 per cent. more than now manufactured at Birmingham, Alabama. Experts do not hesitate to say that iron can be manufactured more cheaply at Sheffield than at Birmingham, and its river transportation facilities will enable Sheffield iron to reach the principal markets at a saving of from

\$2.00 TO \$2.50 PER TON.

A first-class daily newspaper is regularly issued. Furniture Factory, Bottling Works, Bakery, Dummy Street Railroad, Electric Lights, Agricultural Implement Works, 3 Steam Brick Works, 2 Hand Brick Works, 2 Steam Wood-Working Establishments, Water Works, 2 Banks, a Savings Bank, and Steam Job Printing Office already in successful operation, and Iron Pipe Works, 15-ton Ice Machine and five-story hotel, with all modern appliances, will be erected. The Cleveland Hotel, Park House and numerous boarding houses furnish accommodations to travelers. Postoffice, Telegraph Office and Express Office already established. Paint Works, Stove Works and Compress now being erected. Other manufacturing establishments under consideration, and will probably be built shortly.

Good Water. Free Public Schools and Churches. Health and Climate Unsurpassed.

Drainage excellent. Splendid opening for men of push and energy. No "Old Fogy" element here.
No better point for profitable investment.

Sites for Manufacturing Enterprises,

And for Free Public Schools and Churches

Donated by Sheffield Land, Iron & Coal Company.

Population January 1st, 1887, 700; August 21st, 1887, by actual count, 2,583. Increase of population, 300 per cent. in eight months, and only limited by accommodations.

Three years ago the site of Sheffield was cultivated as corn and cotton plantations, and was without a railroad. Numerous two and three-story brick business houses, and one and two-story dwellings have been, and are being erected. The class of buildings will compare favorably with those in cities of 20,000 inhabitants.

LIMESTONE of excellent quality for fluxing iron in unlimited quantities at the furnaces' sites. First-class building stone and brick clay abundant. Rich and extensive deposits of brown hematite iron ore within twenty miles, along the lines of two Sheffield railroads. The Sheffield & Birmingham Railroad runs through the heart of the Warrior Coal Fields, which abound in first-class coking, steam, gas and grate coal. Timber is abundant and cheap.

The Memphis & Charleston Railroad and the Sheffield & Birmingham Railroad are now in operation into Sheffield. The Louisville & Nashville Railroad Co. is now extending its Nashville, Florence and Sheffield division, which will be completed to Sheffield before July 1st, 1888. Surveys of three other railroads have been recently completed to Sheffield, which will soon be the best combined river and railroad transportation center in the South.

Every merchant and every established manufacturing enterprise is doing a profitable business. More are needed. For further information address

ALFRED H. MOSES, Vice-Prest. and Manager

Sheffield Land, Iron & Coal Co., - Sheffield, Ala.

"ANNISTON"

A Romance of the New South."

Hon. Wm. D. Kelley,

THE GREAT PENNSYLVANIA STATESMAN,

After many weeks of careful investigation of the resources and advantages of the iron section of Alabama, lately wrote an exceedingly interesting article entitled "Anniston: A Romance of the New South." In this article he gave an enthusiastic description of the growth of Anniston, widely known as "The Model City of the South," and of its wonderful development and marvellous mineral wealth. Judge Kelley declares that Anniston is an

"IDEAL INDUSTRIAL CENTER,"

And says that "It is in many respects the most remarkable center of the iron industry in the Southern States."



ANNISTON INN.

Anniston is beautifully located in the Alabama Mountains. It is surrounded by the Most Marvellous Mineral Resources of the South, by Vast Forests of Virgin Timber and by a Magnificent Farming Country. There are twelve Furnaces in the "Anniston Iron District," (two of them making the celebrated "Woodstock Iron," being within the city limits, and two more, to make Coke Iron, being under construction.) Anniston now has Three Banks, the Best Schools in the State, Fine Churches, Opera House, one



GRACE EPISCOPAL CHURCH.

of the Largest Cotton Mills in Alabama, Immense Car Wheel and Car Axle Works, Car Works, Rolling Mill, Machine Shops and Foundries, a large Steel Bloomary, the only one in the South, a 90-inch Morse Cotton Compress, immense Fire Brick Works, costing \$100,000, Planing Mills, &c., and is now building two Coke Furnaces, to turn out 2,100 tons of iron a week; Iron Pipe Works, the largest in the world, to employ 900 hands and consume 200 tons of pig iron a day; a \$60,000 Agricultural Implement Factory; Electric Street Railroad; a \$30,000 Union Depot, &c.

Manufacturers, Merchants and others desiring to locate in the best city in the South, where a solid and substantial growth is assured, are invited to visit Anniston or to write for pamphlets, &c., to the

THE UNITED STATES ROLLING STOCK COMPANY, OF NEW YORK, having a capital of \$4,000,000, are now building at Anniston

GIGANTIC CAR WORKS,

Including Rolling Mill, Foundry, Machine Shops, &c., to cost \$1,000,000, to employ 1,000 Skilled Mechanics, and to turn out 20 complete Cars a day, including freight, passenger, sleeping and parlor cars, everything, from making the wheels to the upholstering, to be done in these works. This is the most important industrial enterprise ever established in the South by Northern capital.

THE ENTERPRISES

Now under construction, and for the building and running of which every dollar has been raised, will require over 4,000 workmen in addition to those now here. The population, now 10,000, will be about 25,000 by the end of 1888. Great inducements offered to manufacturers to locate here.



ANNISTON INN—GRAND STAIRCASE.

OVER 100,000 ACRES

Of the Finest Iron Ore, Timber and Coal Lands in Alabama, including the great Cahaba Coal and Iron Property of 40,000 acres of the best Coking Coals in the South, are owned by Anniston capitalists, and are being developed in the interest of this town. These Lands, the New Furnaces, Pipe Works, Railroads to develop these properties, &c., HAVE ALL BEEN PAID FOR IN CASH, THERE BEING NO DEBTS OR BONDS TO ENCUMBER THESE GREAT ENTERPRISES. There are

SPLENDID OPENINGS HERE

for many industries, large and small, such as Cotton and Woolen Mills, Foundries and Machine Shops, Chain Works, Agricultural Implement Factories, Nail Mills, Wood-Working Establishments of all kinds, Brick and Tile Works, Flour and Corn Mill, &c., &c. Wholesale Dry Goods, Grocery and Hardware Houses are needed, and a large trade could be secured at once.

Contractors and Builders will find splendid opportunities for profitable investments in building dwellings, stores, &c. At least 2,000 new houses will be needed this year to accommodate the people to be brought here to operate the new enterprises under way, and others.

ANNISTON'S CLIMATE

Is Unsurpassed for Weak Lungs and Throats. It is dry and bracing, delightfully sunny and warm in winter, and cool, with never-falling breezes in summer. Its location in the mountains makes its summer climate a great attraction, and Northern people will find it cooler and more pleasant here than in their own homes. Here are found Pure Air, Good Water, a Salubrious Climate, Absolute Freedom from Malaria, Well-Paved Streets and the Finest Hotel in the State, costing \$300,000.

Anniston City Land Co.,

Anniston, Alabama.

WOOD WORKING MACHINERY.

FOR ALL PURPOSES

THE BENTEL & MARGEDANT CO., HAMILTON, O., U.S.A.



Stilwell's Patent

Lime Extracting HEATER AND FILTER Combined.

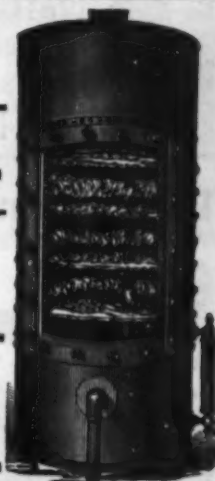
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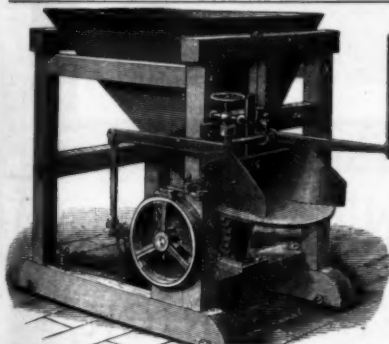
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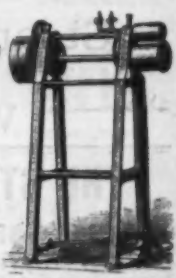
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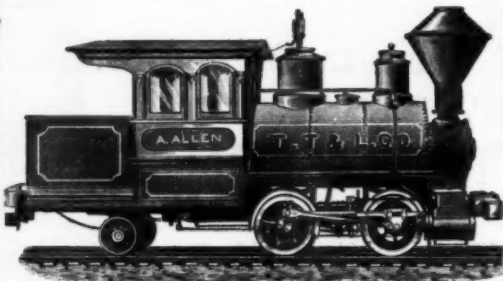
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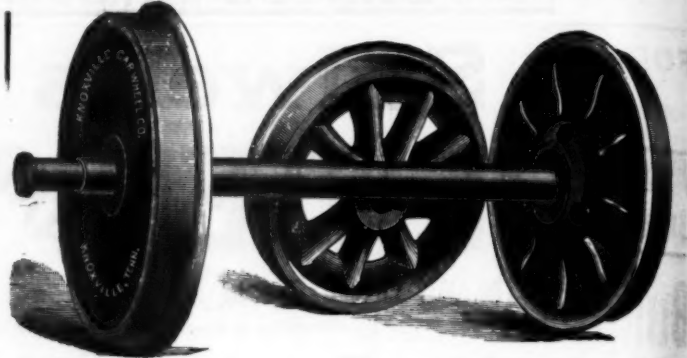
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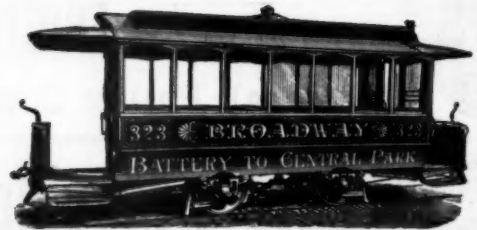
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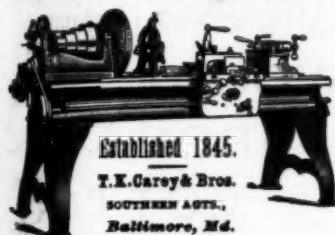
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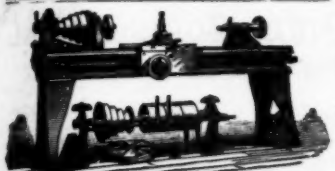
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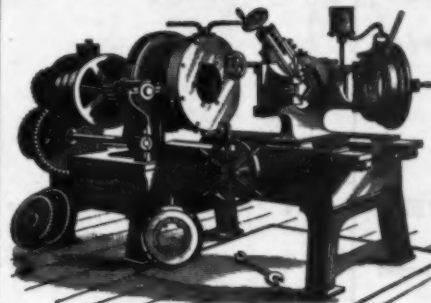
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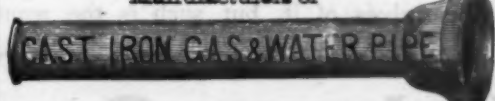
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Is now under construction into the

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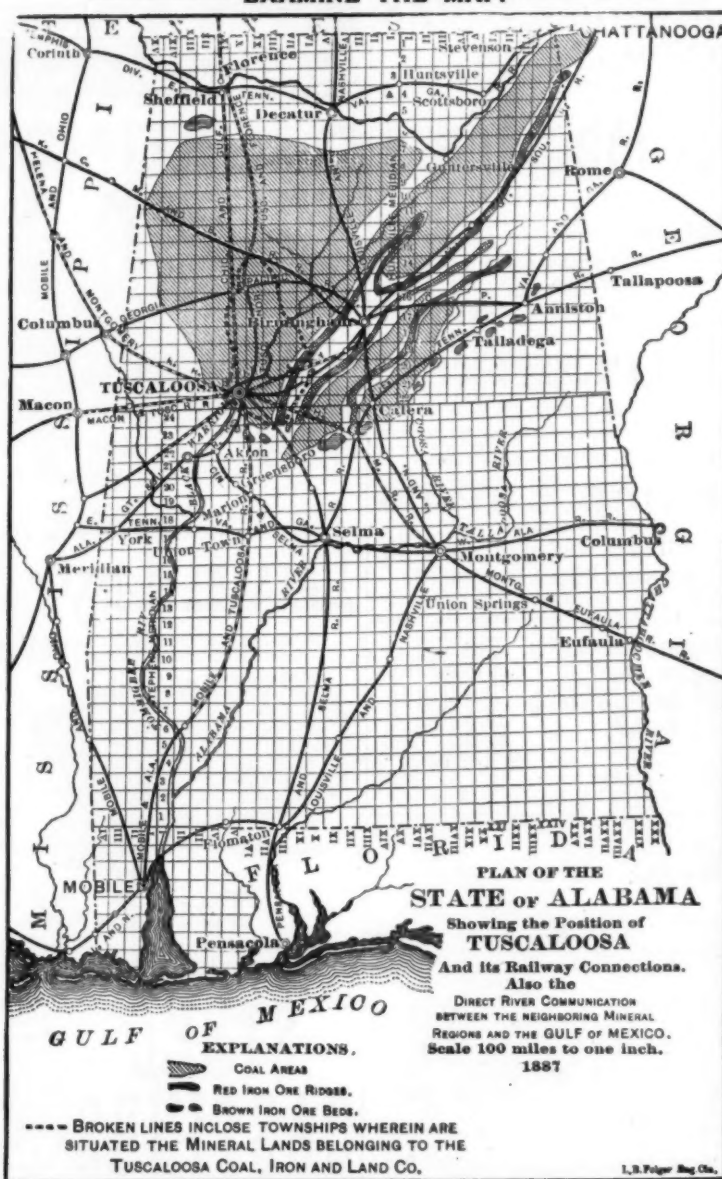
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Many have availed themselves of it, but such is the wonderful richness of the resources of this section that there is

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CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

Anniston—Horse Shoe Factory.—The Universal Horse Shoe Manufacturing Co. have secured a site to build large works for manufacturing horse shoes. The factory will consume from 20 to 40 tons of iron per day. They will add a cooperage factory with a daily capacity of 700 kegs. The company will have a capital stock of \$300,000.

Anniston—Building.—Clardy Bros. have contracted to erect a four-story building on Tenth street for Coffield & Locke.

Anniston—Stove Works.—The \$50,000 stock company reported last week as organized to build stove works, with Samuel Noble as president, have purchased a site of 5 acres, and will soon commence erecting buildings.

Anniston—Machine Works.—C. J. Wilson, of Milledgeville, Ga., reported last week as to make efforts to form a company to manufacture cotton presses, will probably move his machine works to Anniston.

Anniston—Church.—The contract to erect the edifice for St. Paul's M. E. Church, previously mentioned, has been let to L. Mast.

Anniston—Water Works.—The New York Water Supply Co., of New York, have asked for a franchise to build water works.

Bessemer—Fire-brick, Tile and Terra Cotta Works.—J. J. Hoblitzell, of Keystone, Pa., has formed a company to establish works to manufacture fire-brick, tiles and terra cotta.

Bessemer—Cottages.—The Natchez Land & Improvement Co. contemplate building 30 cottages.

Birmingham—Dummy Railroad.—The East Birmingham Land Co. have authorized the issuing of the \$50,000 of bonds for improvements, previously reported. They will extend their dummy railroad to Gate City or Irondale.

Birmingham—Railroad.—Norwood & Green have contracted to build 3 miles of railroad.

Birmingham—The Edison Electric Illuminating Co. contemplate issuing \$30,000 of bonds.

Birmingham—Rolling Mill.—The Tennessee Coal, Iron & Railroad Co. state that a rolling mill will be located at Ensley, previously mentioned.

Birmingham—Locomotive Works.—The Gate City Land Co. are, it is reported, negotiating with parties for the removal of their large locomotive works to Gate City.

Birmingham—The Southern District Telegraph & Electric Co., capital stock \$40,000, has been chartered by E. W. Linn and others.

Birmingham—Building.—William Underwood will erect a one-story brick building, 50x100 feet, and has commenced work.

Birmingham—Railroad.—The Georgia Pacific Railroad Co., previously reported as to extend their railroad from Columbus, Miss., to Johnsonville, Miss., about 134 miles, will receive proposals for the grading,

trestles and cross-ties until May 12. Bids may be for all the work or part.

Brewton—Sash, Door and Blind Factory.—The Porter Manufacturing Co. are building a sash, door and blind factory.

Chapman—Logging Railroad.—The Rocky Creek Lumber Co. will build a narrow gauge logging railroad.

Decatur—Mining.—It is stated that the Manchester Iron & Coal Co. will open mines.

Decatur—Land.—The Fairview Land Co. have purchased 500 acres of land.

Decatur—Ice Factory.—The Decatur Ice Co. will at once put the additional machinery in their factory previously reported.

Flint—Brick-yard.—The Flint City Brick Co. have started a brick-yard.

Flint—Lime Works.—Lime works have been started by G. B. Cattling.

Jackson County—Saw Mill.—T. W. Baxter, of Tullahoma, Tenn., will at once rebuild his saw mill, reported in this issue as burned.

Manchester—Saw Mill.—A saw mill will be erected, and machinery has been purchased. J. L. Stevens can give particulars.

Manchester—Tub Factory.—Negotiations are being made with W. F. Thompson, of Ithaca, Mich., for the removal of his butter-tub factory to Manchester.

Marion—Water Works.—Water works are being agitated.

Selma—Railroad.—The Selma Land, Improvement & Furnace Co. have made subscriptions of \$31,500 each to the Selma & New Orleans Railroad, the Cahaba Valley Railroad and the Atlanta Air Line Railroad.

Sheffield—Houses.—The Sheffield Coal, Iron & Land Co. are having plans prepared for 200 houses to be built at once.

Tuskaloosa—Saw Mill.—A 25 horse-power saw mill has lately been started by Cumins & Rice.

Verbena—Railroad.—The Pratt Saw Mill Co., reported last week as to extend their road, contemplate extending it about 3 or 4 miles, but have made no arrangements yet.

ARKANSAS.

Arkansas—Stave Factory.—Geo. Ladus, of County Line, Mich., is prospecting for timber lands with a view to starting a stave factory.

Benton—Mining.—A company will be organized to develop the Rabbit Foot mine.

Camden—Timber Lands.—Jas. R. Young and others have chartered the Southern Timber Land Investment Co., capital stock \$5,000.

Fayetteville—Street Railroad.—W. C. Killebren, of Little Rock, and S. J. Roane, of Fort Smith, have formed the Fayetteville Street Railway Co. They will begin work within 60 days.

Greenway—Stave Factory.—H. J. Weindell will improve his stave factory.

Greenway—Tram-road.—Hadley & Shepherd are building a tram-road near Greenway.

Jonesboro—Hotel.—A stock company is being formed to build a three-story hotel.

Little Rock—Broom Factory.—John Callahan, of Columbus, Neb., will move his broom factory to Little Rock.

Little Rock—Chair Factory.—W. C. Whitmarsh, L. D. Whitmarsh, J. P. Webb and others have organized the Little Rock Chair Co. to manufacture chairs, etc. The company will locate their factory at Argenta. W. C. Whitmarsh is president.

Little Rock—Iron Ore Lands.—The Capital Land & Mining Co. are prospecting manganese iron ore lands and will purchase drills, etc.

Little Rock—Church.—The First Baptist Church will build a new edifice to cost about \$15,000 or \$20,000.

Little Rock—Glass Works.—Louis Nicoll, of Columbus, Ohio, has been prospecting for a site for locating glass works.

Little Rock—Railroad.—The Kansas City, Fort Scott & Springfield Railroad Co. and the Kansas City, Springfield & Memphis Railroad Co. have consolidated as the Kansas, Fort Scott & Memphis Railroad Co.

Little Rock—Warehouse.—C. E. Rosenbaum will build a large warehouse.

Little Rock—Lumber Mill.—A. M. Doley, of Ohio, has been prospecting with a view to starting a lumber mill.

Mammoth Spring—Hotel.—The Mammoth Spring Water Power & Improvement Co. will rebuild their hotel reported last week as burned. Plans are being prepared.

Pine Bluff—Medicine Factory.—The manufacture of medicines has lately been started by the Able Medicine Co.

Powhatan—Railroad.—The White & Black River Railroad has been surveyed to Powhatan.

Springdale—The Springdale Saving & Investment Co., capital stock \$10,000, has been organized with L. D. Petross as president.

Van Buren—Cotton Compress.—It is stated that Chicago parties contemplate erecting a cotton compress.

Waldo—Planing Mill.—The Niemeyer Lumber Co. are putting in additional flooring machinery.

West Point—Railroad.—Surveys will shortly be made for a proposed railroad from West Point to Des Arc.

Wynne—Mill.—D. C. Cole, of Harrisburg, contemplates starting a mill for getting out wagon materials.

FLORIDA.

Clermont—Canning Factory.—A company will be organized by W. Huber and others to start a canning factory at once.

Clermont—New Town.—A new town is being laid out 23 miles from Clermont to be called Linden.

De Funiak Springs—Medicine Factory.—J. W. Chiles, of West Milton, Ohio, will not start the manufacture of medicines as lately stated.

Enterprise—Street Railroad.—There is talk of a street railroad being built.

Jacksonville—Iron Bridge, &c.—It is rumored that the Jacksonville, Tampa & Key West Railroad Co. will build an iron bridge across the St. John's river to cost \$250,000 or \$300,000, and change the gauge of the Jacksonville & St. Augustine Railroad from narrow to standard.

Jacksonville—Hotel.—F. H. Orvis will probably build a large three-story addition to his hotel during the summer.

Kissimmee—Sugar Factory, &c.—The Florida Sugar Manufacturing Co. have purchased \$75,000 of additional machinery for their sugar factory and materials to build 4 miles of tram-road.

Monticello—Railroad.—The Savannah, Florida & Western Railroad Co. (office, Savannah, Ga.) will build their road to Monticello, previously reported.

Orlando—Railroad.—E. T. Haines, of New York, will, it is said, soon begin building the extension of the Orlando & Winter Park Railroad.

Paola—Hotel.—The hotel reported last week is being built for A. L. Turner. Will have about 60 rooms.

Pensacola—Cigar Factory.—A company is being formed to start a cigar factory. The proposed capital stock is \$10,000.

St. Augustine—Hotel.—Frank W. Smith will build a fine hotel and is having plans prepared.

Tampa—Cigar Factory.—Negotiations are being made for the removal of the cigar factory of Mr. Monne from New York to Tampa.

GEORGIA.

Americus—Houses.—John M. Cobb, of Montgomery, Ala., has purchased a site to build 6 houses.

Athens—Guano Factory.—McGinty & Hunnicutt have purchased a cotton-seed oil mill and will add a guano factory.

Athens—Foundry and Machine Works.—Some machinery has been added to the Athens Foundry & Machine Works.

Athens—Bobbin Factory.—John H. Newton, reported last week as contemplating doubling the capacity of his bobbin factory, has decided not to do so until next year.

Athens—Cotton Factory.—The cotton factory building previously reported as being erected by the Bloomfield Water Power Co. will be occupied by Wood & Coates, of Philadelphia, Pa., as a thread factory.

Atlanta—Car Works.—Car works are reported to be built soon, probably by the Atlanta Car Co., previously reported as chartered.

Atlanta—Match Factory.—Philip Hardson will double the output of his match factory.

Atlanta—Electric Light Plant.—The Georgia Electric Light Co. will, it is stated, increase the capacity of their plant.

Atlanta.—The American District Messenger & Electrical Supply Co., capital stock \$10,000, has been chartered by J. M. Stephens and others.

Augusta—Wagon Factory.—J. H. Lowrey is enlarging his wagon factory and will put in additional machinery and a large elevator.

Augusta—Land.—N. W. Armstrong, representing a syndicate, is reported as negotiating for 6,000 acres of land near Augusta with a view to developing, building dummy railroad, &c.

Augusta—Medicine Factory, &c.—J. H. Alexander, S. C. Durban, John A. Carter, Thomas S. Hankinson and others have chartered the Alexander Drug & Seed Co., capital stock \$15,000, to manufacture medicines, &c., and deal in seeds, chemicals, paints, &c.

Brunswick—Cider and Vinegar Factory.—A cider and vinegar factory, two stories, 40x100 feet, is being built by William Gunby.

Carrollton—Cotton Factory.—A cotton factory is being agitated. If anything is done A. B. Hills can probably give information.

Carrollton—Buildings.—James P. Moore will erect a block of buildings.

Carrollton—Chair Factory.—A chair factory will be started soon.

Carrollton—Hotel.—A stock company has been formed to build a brick hotel to cost about \$50,000. A. B. Hills can give information.

Carrollton—Fertilizer Works.—The Carrollton Fertilizer Co. will double their capital stock and build large works during the year.

Cartersville—Courthouse.—Bartow county will build a new courthouse to cost \$30,000.

Columbus—Stand-pipe.—The Columbus Water Works Co., previously mentioned as to improve their works, have let the contract for a stand-pipe 120 feet high.

Columbus—Bridge.—The Columbus & Western Railroad Co. have commenced work on a new iron bridge at Columbus.

Columbus—Factory.—C. E. Young will start the manufacture of refrigerators.

Conyers—Granite Quarries.—It is reported that the Atlanta Mercantile Co. have sold their granite quarries to the Georgia Granite & Land Improvement Co.

Covington—Oil Mill and Guano Factory.—Mr. Reinhart has formed a company to establish a cotton-seed oil mill and a guano factory.

Dalton—Street Railroad.—A street railroad will probably be built soon.

Dalton—Electric Light Plant.—An electric light plant is talked of.

Dalton—Brick Works.—J. R. McAfee and L. T. Smith have formed a company to manufacture brick.

Dalton—Broom Factory.—C. H. West & Bro. have ordered machinery to start a broom factory.

Macon—Cottages.—Hayes & Mansfield have contracted to build 31 cottages for Mrs. W. M. Cave.

Macon—Publishing.—George L. Mason and others have chartered the Progress Publishing Co., capital stock \$6,000.

Macon—Artificial Stone Works.—B. Rosenblatt and H. C. Bailey are starting artificial stone works.

Macon—Gas Works.—The Consumers' Gas Light Co., who are building gas works, as previously mentioned, have organized, electing W. H. Ross as president; B. C. Smith, vice-president; H. Horne, secretary, and George T. Work, of Philadelphia, Pa., treasurer.

Newnan—Carriage and Buggy Factory.—The Newnan Carriage & Buggy Works contemplate erecting new and larger works during the summer.

Rockmart—Flour Mill.—There is talk of building a flour mill.

Rome—Marble Quarry.—A stock company is being formed to develop the marble lands of A. D. Hardin.

Rome—Fence Factory.—The Farmers' Friend Fence Machine Co. have reorganized and will soon commence the manufacture of fencing.

Rome—Car-wheel Works.—Parties have been examining the old works formerly occupied by Noble Bros. & Co. with a view to establishing car-wheel works.

Savannah—Soap Factory.—S. P. Hamilton, Herman Myers, J. H. Estill, D. C. Bacon, J. J. Dale and others have incorporated the Savannah Soap Works, capital stock \$25,000, to manufacture soap.

Tallapoosa—Cotton Factory.—Efforts are being made to form a company to build a cotton factory.

Tallapoosa—Street Railroad.—J. W. Head, D. A. Starr, Charles J. Berry and others have chartered the Tallapoosa Street Car Co. to build a street railroad. The capital stock is \$20,000.

Towaliga—Gin.—Kinard & Son will rebuild their gin reported last week as burned.

Turin—Ginnery, &c.—The Turin Ginning & Manufacturing Co. will put in additional machinery.

Ty Ty—Saw Mill.—It is reported that C. Reiger will rebuild his saw mill near Ty Ty, reported in this issue as burned.

Waynesboro—Opera House.—Plans are being drawn for a three-story opera house with iron front. C. H. Hyde can give information.

Wheaton—Planing Mill.—W. S. Hawkins has built a saw mill with a daily capacity of 50 M feet.

Wrightsville—Brick-yard.—The Wrightsville Improvement Co. will have a brick-yard started.

KENTUCKY.

Ashland—The Ashland Fair Co., capital stock \$400,000, has been organized with S. S. Savage as president.

Catlettsburg—Electric Light Plant.—An electric light plant will, it is stated, be erected by the Jenny Electric Light Co. of Indianapolis, Ind.

Covington—Brewery.—The John B. Enner Brewing Co., capital stock \$300,000, has been chartered by John Brenner, Charles Pink and August Timmerding.

Frankfort—Bills have been introduced in the legislature to incorporate the Rush River Railroad Co.; the Brandenburg Natural Gaslight, Fuel & Manufacturing Co.; the E. A. Porter Kentucky Cattle Feeding Machine Co.; the Junction Land & Manufacturing Co.; the Louisville Automatic Refrigerating Co., and the Madison Bridge Co.

Frankfort—Shops.—A bill has been introduced in the legislature to appropriate \$60,000 to rebuild the shops at the penitentiary, previously reported as burned.

Hopkinsville—Foundry and Machine Shops.—The Metcalfe Manufacturing Co. have bought the foundry and machine shop of Hanna & Crum, and will operate them in connection with their present plant.

Hopkinsville—Mining, &c.—The Western Kentucky Coal & Iron Mining Co. has been organized with H. C. Gant as president; S. C. Mercer, vice-president; C. H. Dietrich, secretary, and A. H. DeTreville, treasurer.

Lexington—Road.—Proposals for building 2½ miles of turnpike road will be received until May 19 by J. A. McCann.

Louisville—Electric Light Plant.—The Gaynor Electric Supply Co. have contracted to furnish machinery for an electric light plant to be erected at Phoenix Hill Park. The capacity will be for 300 lights.

Louisville—Mining &c.—The Kentucky & Indiana Natural Gas, Oil & Mining Co. has been chartered by H. H. Ferguson, J. V. Reed, D. C. Foote, W. L. Perrin and G. P. Weller. The authorized capital stock is \$1,000,000.

Louisville—Planing Mill.—R. B. Cotter will at once rebuild his planing mill reported in this issue as burned.

Louisville—Plow Factory.—J. E. Vandegreft, of Nashville, Tenn., has been corresponding with a view to starting a plow factory.

Louisville—Publishing.—The Will S. Hayes Music & Poetry Publishing Co. has been organized with John H. Leathers as president.

Louisville—Railroad.—Proposals for building about two miles of railroad in Pulaski county will be received until May 7 by Robert McF. Smith.

Maysville—Wood-working Factory.—Machinery is being added to the wood-working factory of W. S. Frank and others.

Mayfield—Jail.—Graves county will build a jail to cost \$15,000.

Newport—Stove Works, &c.—Samuel Bigstaff, T. C. Miller, W. K. Boal and J. K. Dummick have chartered the Favorite Stove & Range Co., to manufacture and deal in stoves, ranges, etc. The capital stock authorized is \$150,000.

Owensboro—Building.—Proposals for erecting a postoffice building will be received until May 18 by Will A. Freret, Washington, D. C.

Owensboro—Hotel.—J. C. Rudd will build a three-story brick hotel. Plans are being prepared by Robert Boyd.

Owensboro—Hotel.—Robert Boyd is preparing plans for a three-story brick hotel, 60 feet front, to be built by G. W. Williams.

Owensboro—Railroad.—A \$75,000 subscription has been voted to the Owensboro & Falls of Rough Railroad.

Paris—Sewerage System.—The city will shortly decide by a popular vote whether or not to put in a sewerage system.

Richmond—Water Works.—The Richmond Water Works Co., previously reported, have organized with Samuel H. Stone as president; G. W. Evans, vice-president; F. H. Adair, secretary, and J. Stone Walker, treasurer. They are securing information in regard to building water works.

Richmond—Railroad.—Madison county has voted a subscription to the Louisville Southern Railroad.

Winchester—Cotton Factory.—It is reported that New England parties owning a cotton factory are corresponding with a view to moving it to Winchester.

Winchester—Water Works.—It is rumored that water works will be built.

LOUISIANA.

Abbeville—Courthouse.—The contract to build the courthouse, previously mentioned, has been let to N. F. Robertson at \$19,150.

Jeannerette—Furniture Factory.—The Attakapas Furniture Co. have lately started the manufacture of furniture.

New Orleans—Soap Works.—The American Fatty Products Co. contemplate putting in some additional machinery.

Shreveport—Dummy Railroad.—A company is reported as being organized to build a dummy railroad.

Shreveport—Gas Works.—W. E. Hamilton, of Shreveport, and J. R. Ryan, of Birmingham, Ala., have purchased the Shreveport Gas Works, and will make improvements.

Shreveport—Hotel.—P. Youree, previously mentioned as to build a hotel, has let the contract to Thomas C. Johnston and Valentine Werner. It will be three stories, 100x150 feet.

MARYLAND.

Aberdeen—Canning Factory.—Charles B. Osborn will build a canning factory.

Baltimore—Copper.—The Vernon Copper Works, near Baltimore, which have been idle for some time, have been put in operation.

Baltimore—Building.—William Ferguson & Bro. have the contract to erect the large building corner South and Lombard streets for the Farmers' & Merchants' National Bank, previously mentioned. It will be five stories, 53x85 feet.

Baltimore—Church.—Buckley & Winn have received the contract to erect a building, 51x47½ feet, corner Boundary avenue and Hope street, for the Second Congregational Church.

Baltimore—Church.—The Faith Reformed Congregation have selected a site corner Gough street and Patterson Park avenue to build a church.

Baltimore—Warehouse.—James Connaughton will erect a four-story brick warehouse at 407 Franklin street.

Baltimore—Ice Factory, &c.—The Seaboard Storage & Ice Co., capital stock \$200,000, has been chartered to manufacture and sell ice, &c., by William J. Hooper, Theodore Hooper, James E. Hooper, Millard J. Black and others.

Baltimore—Buildings.—Anton Bohn will erect 6 two-story buildings on Hull street near Beason; S. R. Berry, 4 two-story buildings on Norris alley, near Lexington street; Wilbur F. Stubbs, 12 three-story brick buildings on Johnson street, and 22 two-story brick buildings on a street east of Johnson street; Mason R. Shone, 10 two-story brick buildings on Muir street, 4 on Chester street and 44 on Collington avenue; S. F. Gosnell, 7 three-story brick buildings on Fulton avenue and 7 two-story buildings on Bruce alley, and George Bunnecke 7 two-story brick buildings on St. Peter street.

Belair—Railroad.—R. E. Cutler and C. V. Martin are making surveys for the proposed Susquehanna & Deer Creek Railroad, previously reported.

Cumberland—Glass Works.—The Warren Glass Works will be enlarged.

Cumberland—Electric Light Plant.—R. F. Jackson, representing the Waterhouse Electric Light Co., of Baltimore, is, it is said, negotiating to put in an electric light plant.

Cumberland—Machine Works.—It is reported that Merwin McKaig contemplates greatly enlarging his works.

Frederick—Electric Light Plant.—The city has decided to purchase the electric light plant from the Thompson-Houston Electric Light Co., reported last week. The cost will be \$14,500.

Frederick—Dye-house and Electric Light.—The Frederick Seamless Hosiery Co. have erected a dye-house, and contemplate putting in electric light machinery.

Frederick—Bridge.—The county commissioners will build a bridge at Reick's Ford, to cost about \$15,000.

La Plata—Canning Factory.—The Wolfeld Manufacturing Co., of Baltimore, are erecting a canning factory.

Manchester—Railroad.—A subscription of \$15,000 has been voted to the branch railroad, previously reported to be built from the Hanover Branch of the Western Maryland Railroad to Manchester.

Mechanicstown—Furniture Factory.—A furniture factory is reported to be started.

Union Bridge—Evaporating Factory.—Amos Stouffer, of Waynesboro, Pa., contemplates starting a fruit evaporating factory.

Washington, D. C.—Temple.—The Scottish Rite Masons will build a large temple.

Washington, D. C.—Church, &c.—St. Andrew's P. E. Church will erect an addition to their church, 12x60 feet, and put in a large new pipe organ. Proposals are being received for the organ.

Washington, D. C.—A bill has been introduced in Congress to charter the Washington Electric Lighting, Heating, Motor & Power Co., with George Hill and others as corporators.

Washington, D. C.—Buildings.—B. J. and Sarah Flood will erect 2 dwellings on C street to cost \$5,700; William Carley, 4 buildings to cost \$5,600; H. C. Ewald, a \$10,000 building at 714 Seventh street; J. S. Mason, a frame dwelling to cost \$10,000 Addison & Larcombe, a \$10,000 residence at 1620 P street, northwest; John W. Thompson, 7 brick buildings to cost \$6,000, and L. Magruder, a \$12,000 residence on Vermont avenue.

MISSISSIPPI.

Armistead—Planing and Lath Mill.—The Armistead Lumber Co., instead of rebuilding their lumber mill at Pelahatchee, later mentioned as wrecked by an explosion, will move a planing and lath mill from Michoud to Armistead. The daily capacity is 50 M feet.

Baldwyn—Hotel.—J. C. Daniel, of Conith, has received the contract to build a hotel.

Carrollton—Railroad.—A subscription of \$15,000 has been voted towards the extension of the Georgia Pacific Railroad.

Columbus—Railroad.—The Kansas City, Memphis & Birmingham Railroad Co. (office Birmingham, Ala.) will extend their Aberdeen branch to Columbus.

Columbus—Woodenware Factory.—Rosenbaum & Co. contemplate establishing a woodenware factory.

Grenada—Canning Factory.—J. F. Hoyle contemplates starting a canning factory and wants to purchase machinery.

Jackson—School.—Proposals for erecting the brick school building, previously reported, will be received until May 10 by the mayor. It is to be two stories, about 70x100 feet.

Laurel—Saw Mill.—J. Kemper has built a saw mill. The daily capacity is 30 M feet.

Pachuta—Timber Lands.—A New York party has purchased through M. F. Best 32,000 acres of timber lands in Mississippi and 40,000 acres in Alabama. The purchaser will probably develop.

Richburg—Saw Mill.—C. W. Rich has erected a saw mill with a daily capacity of 30 M feet.

Sunnyside—Corn Mill.—W. W. Dunn has purchased machinery for a corn mill.

Fort Worth—Mining.—The Western Coal & Mining Co., capital stock \$6,000, has been chartered by Martin Casey, C. J. Swasey, C. L. Frost, J. W. Williamson and M. R. Kiley.

Fort Worth—Land.—The Aransas Pass Land Co., previously reported, have organized with R. E. Maddox as president; R. H. Sellers, vice-president; T. P. Lenoir, secretary, and E. B. Harrold, treasurer. Their capital stock is \$300,000.

Galveston—Factory.—The Gulf City Co-operative Manufacturing Co. has been incorporated by B. J. Sterling, Fred Koehler, David Morley, W. T. Allin and others. The capital stock is \$50,000.

Galveston—Elevator, Rice and Starch Mill, &c.—The Texas Star Flour Mills, reported last week as increasing their capital stock (authorized) to \$500,000, and to build a grain elevator, expect to start a rice mill and a starch factory this year. They will double the capacity of their flour mill, which is now 550 barrels daily.

Greenville.—The Knights of Honor Building & Loan Association, capital stock \$10,000, has been chartered by J. L. Beall and others.

Howe—Warehouse.—Pitman & Harrison, of Sherman, will build a grain warehouse 60x200 feet.

Jefferson—Iron and Coal Lands.—D. L. Pringle, of Pine Bluff, Ark., has optioned the 500 acres of iron and coal lands referred to last week. He will test the deposits.

McKinney—Cotton Compress.—The name of the company reported last week as formed to erect a cotton compress is the McKinney Compress Co. The directors are W. B. Newsome, J. L. White, J. S. Heard and others. They have contracted for their compress.

San Angelo—Land.—The San Angelo Land Co., capital stock \$160,000, has been formed.

Sherman—Canning Factory.—A canning factory is projected. The Sherman Improvement Bureau can give particulars if anything is done.

Terrell—Cotton Compress.—The name of the company reported last week as to erect a cotton compress is the Terrell Compress Co. The capital stock is \$40,000.

Yoakum—Cotton Compress.—A company with a capital stock of \$40,000 has been formed to erect a cotton compress. J. G. Timmins, of Terrell, can give information.

VIRGINIA.

Amherst—Hub and Spoke Factory.—A hub and spoke factory is to be started soon.

Breckenridge—Tram-road.—The Moore Lime Co. will build a tram road to haul limestone.

Franklin—Oil Mill.—A cotton-seed oil mill is projected. L. R. Edwards can give information when anything is done.

Green Forest—Iron Furnace.—It is reported that parties now opening iron ore mines contemplate building an iron furnace if ore is found in sufficient quantities. B. C. Moomaw can probably give information if correct.

Green Forest—Pulp Mill.—Clemmitt & Sadler, reported last week as to build a wood pulp mill, will also build a straw pulp mill.

Lexington—Water Works.—The enlargement of the water works is contemplated. The mayor can give information.

Luray—Iron Mines.—J. S. Lewis has commenced operations at the Cornelia iron mines, previously mentioned as purchased by him, and will soon be shipping ore.

Luray—Grading.—James Purcell has contracted to grade 8 miles of railroad in North Carolina.

Montgomery County—Gold Miner.—It is reported that a company has been organized at Roanoke to develop gold mines in Montgomery county.

Norfolk—Canning Factory.—A canning factory is to be started at once.

Norfolk—Dry Kiln.—A dry kiln has been added to the saw mill of Hostetter & Co.

Norfolk—Gas Works.—The Norfolk Fuel & Gas Light Co., lately mentioned as chartered, will soon make a survey of the city with a view to commencing work.

Portsmouth—Navy-yard.—The Richmond Locomotive & Engine Works, of Richmond, have been awarded the contract to furnish the United States Navy-yard a Corliss engine to cost \$6,000.

Pulaski City—Railroad.—George F. Mills has contracted to build 4 miles of railroad from Patterson to the Tipton property mines.

Richmond—Water Works.—A new pump-house will be erected at the water works to cost, including pump, etc., \$2,388.

Richmond—Electric Railroad.—The Union Passenger Railway Co. contemplate extending their electric street railroad.

Richmond—Tunnel.—The Richmond & Chesapeake Railroad Co. have received permit to tunnel under Eighth street, and state that they will soon begin work.

Roanoke—Brake Factory.—The Pritchard Brake Co. has been organized to manufacture and sell pneumatic brakes, with I. H. Sands as president, and D. W. Flickwir, secretary and treasurer. The capital stock is to be not less than \$25,000.

Wallace's Switch—Flour Mill.—Riley Stone is repairing his flour mill and putting in some new machinery. He may put in roller machinery later in the year.

Wallace's Switch—Broom Factory.—A. C. Bigley contemplates starting a broom factory and wants to purchase machinery.

Wytheville—Canning Factory.—The Wythe Canning & Manufacturing Co., previously reported, contemplate starting the canning of fowls and meat.

Wytheville—Iron Mining.—J. B. Barrett, of Wytheville, and L. L. Calfer, of Pulaski City, have contracted to mine 100 tons of iron ore per day.

WEST VIRGINIA.

Belleville—Flour Mill.—The Belleville Mill Co. have repaired their flour mill and put in new boiler.

Charleston—Foundry, Machine Shop and Boiler Works.—George W. Greenwood, of Columbus, O., is thinking of starting the foundry, machine shop and boiler works previously reported.

Clarksburg—Publishing.—Vance & Bastable have ordered machinery for a printing establishment.

Fairmont—Electric Lights.—The Montana Coal & Coke Co. will put in electric lights at their mines; also electric motors for hauling cars.

Huntington—Electrical Street Railroad.—J. L. Young will build an electrical street railroad $3\frac{1}{2}$ miles long, to be in operation by July 1. Will use center-bearing rail.

Huntington—Buildings.—Harvey, Fuller & Hagen and C. H. Hagen will erect five-story buildings, 30x100 feet.

Huntington—Gas Works.—Edward H. Brown, A. W. Patterson and J. Parker Dashiell, of Richmond, Va.; Thomas J. Burke, J. A. Cogbill and others, of Huntington, have chartered the Huntington Fuel, Power & Lighting Co., capital stock \$100,000, to manufacture gas by the water process. A site has been purchased.

Huntingdon—Electric Railroad.—Mr. Caldwell, previously reported as to build a street railroad, will operate it with electric motors.

Moundsville—Water Works.—The city council are contemplating building water works, and are securing information as to cost, etc.

Parkersburg—Jail.—Plans have been accepted for a jail to be built by Wood county.

Parkersburg—Street Railroad.—The Park City Street Railway Co. contemplate, it is reported, building a street railroad.

Parkersburg—Bridge.—The contract for repairing the Little Kanawha Bridge has been let to T. A. Black at \$7,200, who sublet it to E. B. Henderson & Co., of Marietta, Ohio.

Randolph County—Land.—Wheeling parties have purchased about 11,000 acres of land, and will settle colonies.

Wellsburg—Car Works.—The Keystone Palace Horse Car Co. has been chartered to manufacture cars for transporting live stock, by Joshua Rhodes, William B. Rhodes, John H. Dalzell and J. Willis Dalzell, of Pittsburgh, Pa., and William H. Herron, Washington, D. C.

Weston—Flour Mill.—The flour mill of Giffin & Co. is being refitted with roller machinery.

Wheeling—Electric Light Plant.—The Board of Gas Trustees have recommended that an electric light plant, previously reported, be purchased at a cost of about \$23,000.

Wheeling—Hinge Factory.—The Wheeling Hinge Co. have let the contract to rebuild their burned hinge factory, reported last week, to Belts, Flading & Co.

Wheeling—Steel Plant.—It is reported that the Aetna Iron & Steel Co. are building an addition to their works.

BURNED.

Baltimore, Md.—The glass factory of Henry Seim damaged \$20,000 by fire.

Covington, Ky.—The cooper shop of James Savage; loss \$1,500.

Houston, Ga.—The corn mill and cotton gin of T. L. & W. L. Harris.

Jackson County, Ala.—The saw mill of T. W. Baxter, of Tullahoma, Tenn. Will be rebuilt at once.

Louisville, Ky.—The planing mill of R. B. Cotter; loss about \$15,000. Will be rebuilt at once.

Lynchburg, Va.—The foundry of the Glamorgan Iron Works damaged about \$1,500 by fire.

New Orleans, La.—The factory of the Louisiana Furniture & Coffin Manufacturing Co.; loss \$40,000.

Pendleton, W. Va.—The saw mill of Miller & Levering.

Roanoke, W. Va.—The flour mill of Olive Alkire; loss \$4,000.

San Antonio, Fla.—The saw mill of Mr. Sultenfuss.

Shoal Creek, Ark.—The saw mill of W. P. Cox & Bro.

St. Cloud, Fla.—The saw mill of L. Pickren.

Tullahoma, Tenn.—The saw mill of J. S. Evans. He will rebuild at once.

Ty Ty, Ga.—The saw mill of C. Rugger, near Ty Ty. Will probably be rebuilt.

Wilsonville, Ala.—The gin, and not the saw, mill of John W. Bowlin has been burned.

Windsor, N. C.—The lumber mill of P. Roscoe; loss \$3,000.

Windsor, N. C.—The saw mill of R. C. Bageman; loss \$2,000.

To Build Electrical Railroad.

SMITHWOOD, TENN., April 28, 1888.

Editor Manufacturers' Record:

My company (Knoxville & Fountain Head Railroad), an English syndicate, are at present surveying and locating a standard gauge railroad from Fountain Head to a junction with the K. & O. R. R., about $3\frac{1}{2}$ miles from here. We propose to put in the very best plant we can get, and the motive power will be electric. We also propose to lay water pipes, electric light and telephone all along the line, but nothing definite is settled about these at present. It is proposed to put up a large cotton mill for the manufacture of high grades of cotton. C. K. McCALLUM, Agt.

MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Baling Press.—N. J. Gorsuch & Son, Westminster, Md., want to purchase a machine for baling hay, with chain, to be operated by a one horse-power engine.

Broom Machinery.—A. C. Bigley, Wallace's Switch, Va., wants to purchase broom machinery; also wants information as to where materials can be purchased.

Canning Machinery.—S. T. Hurley, Grenada, Miss., wants to purchase machinery for a canning factory.

Canning machinery and machinery for manufacturing cans will soon be wanted by E. T. Johnson, Wilmington, N. C.

Dye Works Machinery.—Patterson & Fry, Bluff City, Tenn., want to purchase machinery for dye works for dyeing carpet warps in skeins with a daily capacity of 2,500 pounds.

Electric Light Machinery.—J. D. Cunningham, Orchard Hill, Ga., wants to purchase a dynamo about 35 horse-power and boiler and engine.

Gang Edger.—C. W. Huske, Spout Springs, N. C., wants to purchase a good second-hand gang edger.

Gas and Electric Light Fixtures.—Proposals for manufacturing and putting in the gas and electric light fixtures for the government building at Tyler, Texas, will be received until May 11 by C. S. Fairchild, Washington, D. C.

Ice Machinery.—J. D. Mitchell & Co., Bristol, Tenn., wants information as to the cost of machinery for an ice factory.

Machinery for stripping willows is wanted by J. W. Slappey, Marshallville, Ga.

Pipe.—The mayor of Lexington, Va., will shortly want to purchase about $3\frac{1}{2}$ miles of 4-inch iron water pipe.

Rails, Bolts, &c.—Proposals for 156 tons of 50-pound steel rails, 1,500 steel angle plates, 3,200 track bolts with Harvey lock nuts, 10,500 pounds track spikes, 5 steel switch split switches, 5 steel frogs, 5 ground lever stands, 5,700 creosoted yellow pine ties, railroad tools, lumber, etc., will be received until May 8 by James Fulton, paymaster general U. S. N., Navy Department, Washington, D. C.

Street Railway Equipments, &c.—Natt Atkinson, Asheville, N. C., wants full information in regard to iron rails, cars, power, &c., for street railroad.

Water Works.—The Richmond Water Works Co., Richmond Ky., want information in regard to building water works.

WALNUT COVE, N. C., April 22, 1888.

Editor Manufacturers' Record:

We expect to establish near Blew's Creek Station a saw mill, dresser and other machinery within one month. Capacity 35 horse power boiler, with 30 horse-power engine. J. P. CHARLES & Co.

WHEATON, GA., April 25, 1888.

Editor Manufacturers' Record:

Have my new planing mill now running, and fully equipped with a capacity of 50 M feet per day. W. S. HAWKINS.

KNOXVILLE, TENN., April 24, 1888.

Editor Manufacturers' Record:

We applied for a charter to start a cracker factory, but we have not organized yet as a company. E. J. DAVIS.

To Enlarge Ice Factory.

ANNISTON, ALA., April 23, 1888.

Editor Manufacturers' Record:

We have increased our capital stock to \$30,000, and will put in new 10-ton ice machine at once. Machine to be completed and making ice by June 1st.

ANNISTON ICE MFG. CO.

To Build Saw Mill.

NEW BERN, N. C., April 22, 1888.

Editor Manufacturers' Record:

We contemplate erecting a saw mill with capacity of 50 M feet daily, to be running by October, 1888.

GEO. W. KUGLER & SONS.

To Build Water Works.

LYNCHBURG, VA., April 26, 1888.

Editor Manufacturers' Record:

I have contracted for the construction of the water works at Chatham, Va., to cost in the neighborhood of \$7,000.

WM. H. FORD.

Building Planing Mill.

CEDARTOWN, GA., April 24, 1888.

Editor Manufacturers' Record:

Capacity of our mill will be 30 M feet per day. Will make specialty of flooring and ceiling. Will be running by 15th of May.

J. W. DUNCAN & CO.

Contemplate Starting Furniture Factory.

LENOIR, N. C., April 26, 1888.

Editor Manufacturers' Record:

Messrs. Harper, Bernhardt & Co. contemplate building a furniture factory during the year.

W. W. SCOTT, JR.

FREDERICK, MD., April 27, 1888.

Editor Manufacturers' Record:

We put our machinery in motion May 17th, 1887, with 12 hands, un instructed. We are now employing between 80 and 90. Feeling the necessity of having better facilities for dyeing our goods we are now erecting a large dye house which will be finished to-day with all modern improvements. We expect in the near future to put in electric lights.

FREDERICK SEAMLESS HOSIERY CO.

Planing and Lath Mill.

ARMISTEAD, MISS., April 27, 1888.

Editor Manufacturers' Record:

We shall, instead of rebuilding our old mill at Pelahatchie, move here and put up a large mill, at present in Michigan, belonging to our Mr. Bond, which has a capacity of 50 M feet per day, and includes a lath mill and planing machines, all machinery being of the latest improved patterns. We expect to be ready for business again by August 1st.

THE ARMISTEAD LUMBER CO.

CALERA, ALA., April 24, 1888.

Editor Manufacturers' Record:

I am now preparing to enlarge my shoe factory; will employ at least 50 hands.

SHELBY SHOE FACTORY.

Sewerage System to be Built.

MONTGOMERY, ALA., April 24, 1888.

Editor Manufacturers' Record:

We have received the contract, and signed same, for building the city sanitary sewerage in this city according to the plans furnished by City Engineer Williamson. We have purchased all materials, have men and tools on the way, shall begin construction with about 300 men in a few weeks, and push same forward to completion.

HOWLAND & ELLIS.

Hotel to be Built.

ANNISTON, ALA., April 26, 1888.

Editor Manufacturers' Record:

We will build a hotel on the corner of Wilmer and Tenth streets. "The Wilmer Hotel" will be three stories, stone and brick 44 rooms. All modern improvements, &c.

COBB & MOORE.

Will Build Logging Railroad.

CHAPMAN, ALA., April 29, 1888.

Editor Manufacturers' Record:

We are going to build a narrow gauge road for logging purposes.

ROCKY CREEK LUMBER CO.

Will Double Capacity Flour Mill.

GALVESTON, TEXAS, April 27, 1888.

Editor Manufacturers' Record:

The Texas Star Flour Mills have amended their charter, increasing their authorized capital to \$500,000, and by adding to their purpose of incorporation the manufacture of starch, milling of rice and the maintenance of public elevators, all of which is contemplated to be put in operation this year. They also intend to double their present capacity of flour mill, which is 550 barrels in their new mill, and to increase the storing capacity of their 400,000 barrel elevator.

J. REYMERSHOFFER.

Enlarging Tack Factory.

BIRMINGHAM, ALA., April 28, 1888.

Editor Manufacturers' Record:

We commence by Monday the 30th to build addition, 60x180 feet, two stories high, to the tack works. We have already bought 81 more tack machines; also other machinery. I will go to Binghamton, N. Y., to select additional machinery for the manufacture of hoes, forks and farm tools. Will start the 7th of May.

BIRMINGHAM TACK WORKS,
C. B. RUSSEL, Manager.**Dummy Railroad.**

DAYTON, ALA., April 21, 1888.

Editor Manufacturers' Record:

The road that will be built from this place to Faunsdale will be a dummy line. It will be constructed by a stock company consisting of R. W. Price, H. W. Morgan, Jno. F. Watkins & Co. and others. The right of way has been donated. The distance is 8 miles.

P.

Cider and Vinegar Factory.

BRUNSWICK, GA., April 28, 1888.

Editor Manufacturers' Record:

I am now making the necessary arrangements for erecting a building suitable for the manufacture of cider and vinegar from fruits and acids. Its capacity will be about 100 brls. each per day.

WM. P. GUNBY.

Building Hotel.

ST. AUGUSTINE, FLA., April 26, 1888.

Editor Manufacturers' Record:

We have in process of erection a hotel in this place, which we expect to be completed the coming fall—that is, the main building. We expect to put up an addition to same, and when all is completed the house will contain 100 rooms. Solid brick, with modern improvements.

HENDERSON & VEDDER.

Built New Factory.

LOUISVILLE, KY., April 26, 1888.

Editor Manufacturers' Record:

We have just completed a large new factory, 5 stories, front 100 feet by 150 feet deep. Capacity 1,000 cases and caskets per week.

LOUISVILLE COFFIN CO.

To Manufacture Mantels.

LOUISVILLE, KY., April 26, 1888.

Editor Manufacturers' Record:

Our building, which is very nearly completed, will be used for the manufacture of marbleized slate mantels. It is 50x38 feet, three floors, with a steam-power elevator.

THE FISCHER-LEAF CO.

Cotton Compresses to be Erected.

TERRELL, TEXAS, April 28, 1888.

Editor Manufacturers' Record:

We have formed a company called the Terrell Compress Co.; capital stock \$40,000, all paid in. Also, a company has been formed at Yoakum, with \$40,000 capital stock, all paid in.

JAMES G. TIMMINS.

To Erect Cotton Compress and Warehouse.

MEMPHIS, TENN., April 26, 1888.

Editor Manufacturers' Record:

The improvements we have under construction or contemplation is the erection of a cotton warehouse, and the re erection of a cotton press burned in November last.

MERCHANTS' COTTON PRESS & STOR. CO.

Building Cotton Mill.

ROCK HILL, S. C., April 28, 1888.

Editor Manufacturers' Record:

The contract for building the Standard Cotton Mills has been awarded, and they are to be completed by November 1, 1888. Capacity will be 6,000 spindles and 200 looms.

JOHN R. LONDON.

Starting Saw Mill.

SELMA, ALA., April 28, 1888.

Editor Manufacturers' Record:

The saw mill to be started at Selma will be in the firm name of O'Connor, Vance & Co., instead of Vance Bros. We expect to be sawing in 60 days' time. Hard wood of all kinds will be worked, more especially white oak, also pine and cypress. Capacity of mill 40,000 feet per day.

O'CONNOR, VANCE & CO.

Additional Machinery.

SALEM, N. C., April 27, 1888.

Editor Manufacturers' Record:

We are putting in our cotton mill five new Whittin spinning frames, 15 looms and necessary preparatives.

F. H. FRIES.

To Manufacture Ice.

SAVANNAH, GA., April 27, 1888.

Editor Manufacturers' Record:

We have formed a company called the Artesian Ice & Storage Co., for the purpose of manufacturing ice and furnishing cold storage; paid in stock \$50,000. Will be in operation June 1. We have a building 50x215 feet; our capacity will be 25 tons per day.

SAMUEL P. HAMILTON,
Pres't and Treas.**Saw Mill.**

SPOUT SPRINGS, N. C., April 25, 1888.

Editor Manufacturers' Record:

I have just purchased a 50 horse-power steam outfit for a saw mill to be operated at this place. I now want a good second-hand gang edger.

C. W. HURKE.

Will Build Electrical Railroad.

HUNTINGTON, W. VA., April 24, 1888.

Editor Manufacturers' Record:

I will build an electric street railroad in this city. Contracted to finish line by July 1, 1888, 8 1/2 miles long. Will use center baring rail.

J. L. YOUNG.

Carrollton Moving Forward.

CARROLLTON, GA., April 27, 1888.

Editor Manufacturers' Record:

A stock company has just been formed here to build a fine brick hotel, costing \$50,000.

The building of the Chattanooga, Rome & Columbus Railroad is progressing very rapidly. Nine tenths of its grading, from Chattanooga to Carrollton, a distance of 140 miles, has been completed, and the cars will be running to Carrollton by July 1st next. This road, when completed, will be one of the best lines east of the Mississippi river, a through line from Cincinnati to Florida.

Our enterprising citizens have formed a land company and have agreed to give free sites to all manufacturing enterprises.

Askew, Bradley & Co. are now erecting a fine three-story brick block. The building is to be very large.

The Carrollton Fertilizer Co. will double the amount of stock and build fine works during this year.

Jas. P. Moore is making arrangements to build a fine brick block with a public hall.

We are soon to have a first-class chair factory, also another new railroad from Atlanta, Ga., the Atlanta & Selma Air Line. That will give Carrollton six railroad connections.

A cotton factory is being agitated by our cotton men.

The Hutcheson Manufacturing Co., of Carrollton, are working night and day in the cotton factory. They have recently lighted their factory with electric light. For the first six months of this year they will declare a dividend of 12 1/2 or 15 per cent.

A. B. HILLS.

New Saw Mill.

AMITE CITY, LA., April 23, 1888.

Editor Manufacturers' Record:

We have built a new saw mill of about 20,000 feet capacity, to supply lumber for our own factory solely, and added a couple of lathes in our shop. We have to run 11 working hours now to be able to supply demand.

GULLET GIN CO.

Contemplate Adding Dye Works.

BLUFF CITY, TENN., April 25, 1888.

Editor Manufacturers' Record:

We are thinking of putting in dye works for dyeing carpet warp in skeins with capacity of about 2,500 pounds daily. Will want to buy entire outfit.

PATTERSON & FRY.

Saw Mill and Heading Factory.

DICKSON, TENN., April 23, 1888.

Editor Manufacturers' Record:

The Dickson Co-operative Manufacturing Co. and the Dickson Lumber & Manufacturing Co. are now in operation. Messrs. Dawson & Watson, of Kokomo, Ind., are arranging to start a saw mill and heading factory by June 1, which will give employment to some 45 hands, which they will bring with them.

P.

BRUGH'S MILLS, VA., April 23, 1888.

Editor Manufacturers' Record:

I have bought my machinery for canning factory, also cans. Hope to put up 8,000 cases of tomatoes this season.

RUFUS BRUGH.

WHEELING, W. VA., April 27, 1888.

Editor Manufacturers' Record:

We expect to erect an ore plant, providing the council of the city appropriate the amount asked for. Size plant, 160 lamps.

BOARD OF GAS TRUSTEES,

A. J. SEAMON, Secretary.

Athens, Tenn.

The Athens Mining & Manufacturing Co., of Athens, Tenn., have published a pamphlet setting forth the resources and advantages of that town, and from it we take the following statements showing what claims are made for that place:

"Athens, East Tennessee, is the capital of McMinn county, situated on the East Tennessee, Virginia & Georgia Railway, the great commercial thoroughfare between New York and New Orleans, at its junction with the Nashville & Tellico Railroad, midway between Knoxville and Chattanooga. The present population of the town is about 2,500, but is increasing very rapidly, and, on account of the vast improvements now being erected by the Athens Mining & Manufacturing Co., is sure to attain a population of at least 10,000 to 15,000 inside a few years. It is situated in one of the most picturesque portions of the State, and is surrounded by wonderful natural resources. In addition to forests of fine timber, large deposits of variegated marble, it is within eight to twenty miles of the most immense deposits of brown and red hematite ores, of superior quality in the Southern iron region, and inexhaustible colored slate deposits equal in quality to the Vermont quarries. These great natural resources, which will be more fully spoken of hereafter, are being developed by the new railroad from Athens to Tel-

lico. The fertile valleys between the ranges of hills make McMinn county one of the richest counties in East Tennessee, and amply sufficient in agricultural wealth to support a large manufacturing population. The climate of East Tennessee is unexcelled by any portion of the Union; the health of Athens is unsurpassed by any town in the State. It is absolutely free from all malarial or epidemic diseases. Athens has now in active operation the Athens Woolen Mills, capital \$100,000, employing over one hundred hands and producing about 2,000 yards of jeans daily; the Athens Foundry & Machine Shops, which manufactures anything from a nut or bolt to a complete saw mill outfit, including engines and turbine wheels, and does a thriving business; the Athens Flouring Mills, full roller process and cost about \$30,000; steam brick works, with a capacity of 30,000 brick per day; planing mills and lumber yard, and numerous smaller industries. Adjacent to Athens are the Mount Verd Cotton Mills, and the Eureka Cotton Mills, with capitals of \$50,000 and \$30,000 respectively. Athens has also the First National Bank, with a capital of \$75,000, which is to be increased; the Athens Building & Loan Association, with a capital of \$25,000, organized to meet the urgent demands in that direction. In addition to its industries, Athens is also a distributing point for not less than thirty-two towns and villages in McMinn and adjoining counties, and with the exception of Knoxville, does a larger railroad busi-

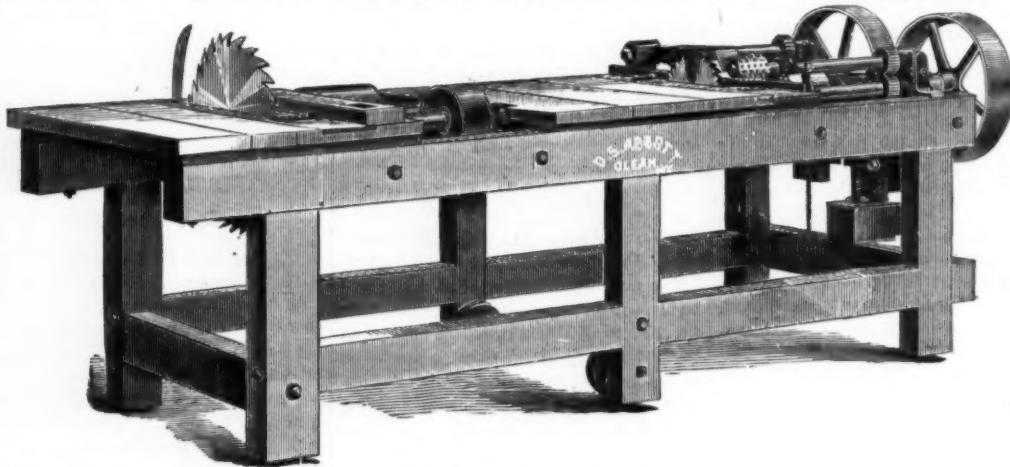
ness than any point between Bristol and Chattanooga. The educational facilities of Athens are excellent. It is the seat of the Grant Memorial University, the most prominent, prosperous school of the M. E. Church in the South, and which has at present an enrollment of 300 students. Some of the graduates of this institution, including the present governor of the State, are among the very prominent citizens of the country. The Forest Hill Academy, a public school, which is presided over by able masters, has an average attendance of 235 pupils. There are also several private schools, and steps are being taken now for the organization of graded schools. There are in McMinn county twenty schools for white children, fifteen for colored, and seven high schools. The scholastic population of the county is 6,495.

Athens has at present two Methodist Episcopal churches, one Presbyterian, one Episcopalian, and two African churches. A Baptist church is to be built at once. The church membership, and the attendance upon religious services, is a very large percentage of the population. Athens has also a Young Men's Christian Association, a Woman's Christian Temperance Union, Sons of Temperance, a G. A. R. Post, and other organizations, chief among them the Masonic orders.

Morally and socially Athens stands at

points or teeth, which are more positive, and will not wear smooth in a short time like the common fluted roller. The bolter has one of these improved feed rollers, which carries the slab to the saw without taxing the strength of the operator. This feed is driven direct from the line shaft, so no counter-shaft for feed is required and all short belts dispensed with. The feed rollers are set so the material is pressed toward the guide, which insures even thickness of lath. The lath saws are covered with a housing to protect the operator. Saws can be taken off for filing and replaced with convenience. In hemlock this machine is cutting from 25,000 to 30,000 laths per day with two saws; but with a three-saw machine, in good pine, much more is realized. Messrs. Abbott & Thurber, Olean, N. Y., are the manufacturers.

We have received from the publishers, Messrs. John Wiley & Sons, 15 Astor Place, New York, "Notes on the Compressive Resistance of Freestone, Brick Piers, Hydraulic Cements, Mortars and Concretes," by Q. A. Gillmore, Ph. D., Colonel Corps of Engineers, Brevet Major General U. S. A.; author of "Treatise on Limes, Cements, etc.," "Treatise on Coignet Beton and Artificial Stones," "Report on Compressive Strength, etc., of the Building Stones in the United States," etc., etc. The author announces that the tests of several kinds of building



IMPROVED GANG LATH MILL.

the head of the list. Her people are quiet, sober and energetic, and street rows and squabbles are things little known. The society of the place is first-class in every respect, and taken as a class, the people are educated far above the average, and are whole-souled and hospitable.

Improved Gang Lath Mill.

The manufacturers of the lath mill shown in the accompanying cut say: "After long experience in building lath mill machinery, we can confidently say we have brought this machine to a state of simplicity, effectiveness and durability which is all that could be desired, and think we are justified in this assertion by the numerous testimonials we are constantly receiving. The necessity for a first class lath mill, at a moderate price, was the incentive to this invention." In order to keep the price as low as possible the manufacturers adopted a stout hardwood frame, thoroughly bolted, which answers all requirements. The saw mandrels are of heavy steel, with pulleys for eight-inch belt. The pulleys are turned inside as well as out, to insure perfect balance for high speed. The lath saw is 12 inches in diameter; bolter saw 22 inches. The stock is fed to the lath saws by four feed rollers, two in front and two in rear of saws, all geared together in a very simple and effective manner.

The feed rollers are an important advantage in this machine, being of hardened

materials discussed in the volume were obtained mostly by a machine of extreme delicacy, having a maximum working pressure of 800,000 pounds, which was erected at the Watertown Arsenal, near Boston, some years ago by Mr. Albert H. Emery, under the direction of the Board on Iron and Steel appointed by the President in accordance with the Act of Congress of March 3, 1875.

THE Sibley Cotton Mills, Augusta, Ga., have declared a 4 per cent. dividend for the past six months.

We have received a copy of the MANUFACTURERS' RECORD, a weekly Southern industrial and hardware paper of 52 pages, published at Baltimore. This paper, besides having the ad's of all the latest and best improvements of everything useful, we may say, contains a great deal of beneficial and interesting reading matter. Every merchant and mechanic should subscribe for the MANUFACTURERS' RECORD.—Review, Ritchie C. H., W. Va.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

Ten Days on the Picturesque B. & O.

The Railway Line from the Mississippi to the Great Lakes and the Atlantic.

A Pleasant Sojourn Among the Historic Hills and Fertile Valleys of Maryland.

[Special correspondence MANUFACTURERS' RECORD.]

CUMBERLAND, MD., April 24, 1888.

Remarked a noted English traveler while on a visit to this country, the great desideratum in going from one place to another in this busy, rushing age, especially when the iron horse is so readily harnessed and at all times so ducedly convenient, is

Speed,
Comfort,
Convenience,
and last, but not least,
Courteous attention.

This astute, well-meaning Briton being asked, after doing up the American Continent, if all those conveniences could be had in this country, he replied:

"Most assuredly. They can be enjoyed on the Picturesque Baltimore & Ohio Railroad."

Kind reader, you ask why are these luxuries to be obtained especially on this iron thoroughfare, running through the heart and the wealth, the culture and refinement of this country.

Because it is a part and parcel of the new management of this road to give the minutest attention to every detail. Nothing is left undone which should be done to make the traveling public comfortable, snug, cozy and self-contained, and this is the motto of the B. & O. R. R.

Speaking of details, just stick a pin here. While looking out of the car windows along the main line, watching the budding of the trees and the slow approach above the earth's surface of the new season's crops, my attention was drawn at once to quite a significant thing as we came to a stop at one of the picturesque stations on the line of road. The engineer and the conductor approached each other, took out their time pieces, compared the "march of time," saluted each other in the affirmative; then the engineer made way to his engine, while the conductor stepped aboard, pulled the bell cord, and in a jiffy we were taking in the beauties of hill and dale along the Cumberland Valley in all its peculiar, passive enchantment and pastoral loveliness.

Well, what of all this?

Ah, my dear fellow travelers, this one act of the two men, who hold the lives of thousands in their hands, shows systematic management, due regard for the traveling public, and the appreciation of great responsibility, which simply means, boiled down into the smallest compass—

Caution and safety.

Now stick two pins here while a pointer is given free gratis. This precautionary step is taken all along the line of road, and is highly commendable, sagacious, prudent and wise. It's funny, but quite natural to realize how comfortable one feels when he knows he is on time while traveling on the rail, and if, perchance, behind time, to be aware of the fact that there is always a comparison going on between the men who are in charge of affairs, and in this case

Comparisons are not odious.

Is there a railroad system in the United States which cares more for the comfort and convenience of its patrons than the picturesque B. & O.—for those who seek the cities along its line in the winter, or for those who are in search of inviting nooks among nature's hidden paths, in the dead, dull and enervating dog-days of mid-summer?

Not many, I ween.

An illustration to the point. Take for instance the care and attention paid every

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West Point, Va.

A growing town. Property increasing in value. *Factories invited.* **New enterprises exempt from taxation.**

Splendidly located on York river.

Steamer lines to Europe, New York — Baltimore, &c.

Oysters and fish in unlimited abundance. Surrounded by the great fruit and trucking country of Virginia. For any particulars desired, address,

E. WILKINSON, MAYOR.

Brown Ore Lands.

5,000 Acres Brown Hematite Iron Ore & Timber Lands for Sale.

We have for sale about 5,000 acres of Brown Hematite Iron Ore Lands. The ore on this property is practically inexhaustible. **THOUSANDS OF TONS VISIBLE TO THE EYE.** *The quality is equal to any in the South,* being low in phosphorus, and will average fully **56 per cent. Metallic Iron.** We invite inspection and examination. It is situated about two miles from the main line of railroad, and with a branch built over a very feasible route two or two and a half miles in length, the ore can be placed on the cars at a cost of from **25 to 40 cents per ton.** This property is also heavily timbered with Yellow Pine, and the water privileges unexcelled. Contracts can be made to supply thousands of tons of these ores to furnaces contiguous at prices ranging from **one to one and a-half dollars per ton, f. o. b. at the mines.** Apply to

REES & CAMFIELD,
Anniston, Ala.

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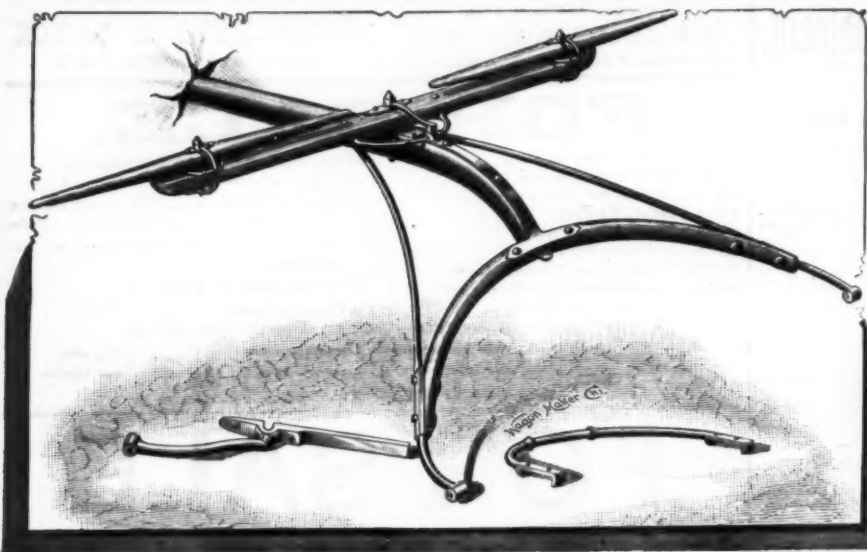
Manufacturers'

*** Record. ***

The FREELAND DOUBLETREE and SINGLETREE REGULATOR.

[United States and European Patents granted December 6, 1887.]

We ask a careful examination of the "Freeland Doubletree and Singletree Regulator," upon which patents have just been issued. We claim it to be one of the most valuable, durable and cheap devices to which the attention of carriage manufacturers has been called. It is simple in construction and can readily be applied to Light and Heavy Single and Double Wagons, Sleighs, Mowers, Reapers, etc. For Double Carriages its use renders stay-straps unnecessary, holds the doubletree firmly in position, prevents rolling and rocking, at the same time relieving the bolt of strain, thus rendering it less liable to break. Should the bolt in doubletree break, this device holds doubletree firmly in place, thereby preventing accident. Should singletree break or trace



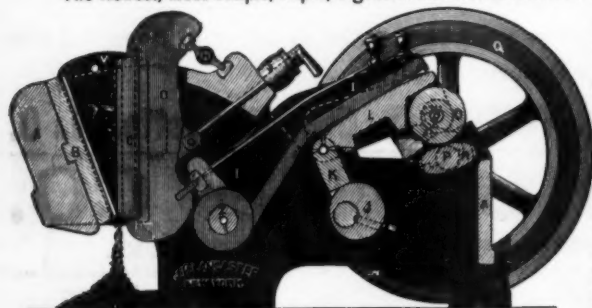
unhook, the regulator controls action of doubletree, thereby preventing neck yoke from leaving the pole. For single carriages, wagons or sleighs it holds the singletree firmly in position, preventing it from rolling or rocking, the same as in double carriages; the strain being taken off the bolt, dispensing with the use of stay straps. In the event of a trace unhooking the horse is prevented leaving the thills. For two horse wagons extra heavy irons are made, with heavy clevis combined, and so constructed that by drawing the hammer the doubletree can easily be removed. The doubletrees are provided with clevis ready for use with chain, after removal. For Mowers and Reapers—it prevents the horses from being pulled back on cutting bars, and is of great assistance in

turning corners by removing strain from end of pole, thus preventing it from breaking. It possesses great advantages over ordinary fastenings in point of strength, utility, safety and cheapness. Manufacturers of wagons and agricultural implements who have seen the Regulator, agree with us as to its superior advantages, and consider it only a question of time when it shall come into general use. The irons can easily be applied to old as well as new work, either by farmer or mechanic. We feel confident all will agree with us that the Regulator is worth all it costs for either of the following reasons: 1st. It holds doubletree and singletree firmly in position—no rolling or rocking. 2d. By its use stay straps and chains are rendered unnecessary. 3d. It prevents accident by reason of stay strap breaking. 4th. It prevents accident in event of bolts breaking. 5th. It imparts elegance to appearance of carriages. 6th. The general utility of Regulator.

FREELAND & BRADLEY, Sole Manufacturers, Wellsville, Alleghany County, N. Y.

The "LANCASTER" ROCK BREAKER AND ORE CRUSHER.

The Newest, Most Simple, Rapid, Lightest and Most Effective Crusher Extant.



Adjustable while running to yield any uniform grades of product.

Less power required and less liability to breakage, and less in first cost and in subsequent wear and tear, than any other machine for which such advantages are being either attempted or claimed.

Competitive trials and tests solicited. The "Lancaster" Crushers may be mounted on wheels, worked by hand, horse-gear, steam or other power, and also fitted with Rotary

TYPENOI LONGITUDINAL SECTION.

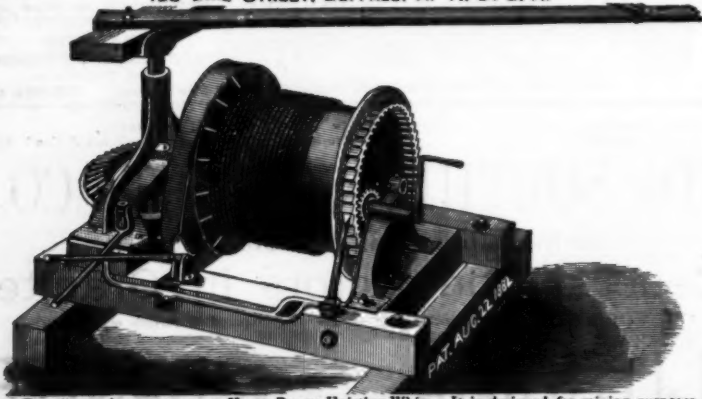
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JAS. H. LANCASTER, 187 Broadway, New York.

Sole Maker of the "Lancaster" Hand and Power Coal Wedging and Coal Drilling Machines.

THE CONTRACTORS' PLANT MANFG. CO.

129 FRIE STREET, BUFFALO, N. Y., U. S. A.



The illustration represents a Horse-Power Hoisting Whim. It is designed for mining purposes or raising coal or water out of a shaft. It will raise a bucket or weight weighing seven hundred pounds seventy-five feet per minute. The machine is made entirely of iron and steel excepting the sills, and is not affected by dry or wet climates. The hoisting drum is under complete control of the man at the shaft, landing the bucket by operating the levers at hand, and by which means the drum can be thrown in and out of gear at will when the horse is in motion, or the bucket lowered by the brakes as safely and conveniently as by a steam power hoist. No clutches to throw out or in gear. The drum will carry 300 feet or more of $\frac{1}{4}$ inch steel wire rope. The machine is **SMALL, LIGHT, EASILY HANDLED AND DURABLE**, sufficiently strong to do the desired work, and so perfectly simple that it can be readily understood by any miner or person inexperienced with machinery. There is a safety attachment on the end of drum in case of an accident, the dog always being in gear when the bucket is being raised. Easily transported; can be made in sections small enough for mule-back transportation if desired.

We Also Manufacture Horse-Power Hoist for Railway Contractors, Bridge Builders and Quarrymen.

Correspondence Solicited. Illustrated Catalogue furnished on application. Mention this paper when you write.

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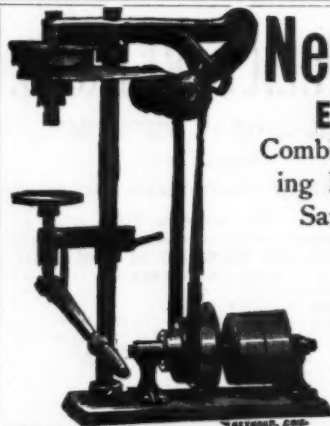
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One, Two and Three
**Spindle
DRILLS.**

Sensitive,
STRONG
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Workmanship
UNEQUALLED.

Special Machinery, Tools, Models, &c.
BUILT BY DAY OR CONTRACT.



New Bench Drills,

EMERY GRINDING MACHINES,
Combined Sawing and Boring and Shaping Machine, Foot and Power Band Sawing Machines, Foot and Hand Power Circular Saws.

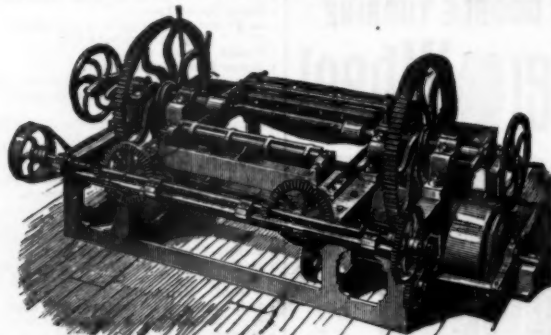
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154 Lake Street, - CHICAGO, ILL.

Write for Price Lists and Discounts.

The "Blakeslee" Veneer Machine.

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GAS WORKS APPARATUS AND HOLDERS,

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PLANS, ESTIMATES AND DRAWINGS FURNISHED.

High Grade Rotary Cutting Tools--For Working Wood.

ALL NEW DESIGNS. BEST QUALITY AND WORKMANSHIP.

ALL the LATEST

AND
BEST IMPROVEMENTS.

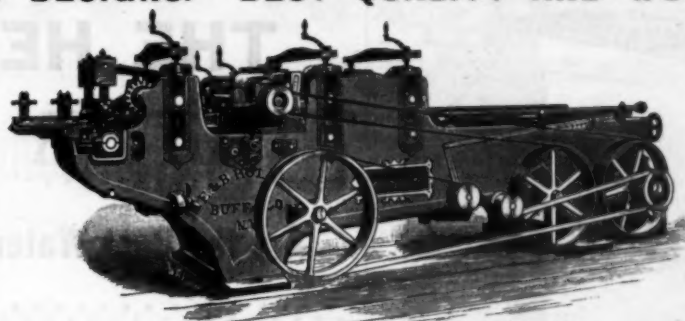
Nothing Cheap or Old.

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DESCRIPTION AND ENGRAVINGS

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E & B. HOLMES, 59 CHICAGO STREET, BUFFALO, N. Y.



Our New Band Re-Saw and Scroll Saw Combined, and our Circular Re-Saw are finding favor with all Wood-workers.

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CIRCULAR

Saw Mill

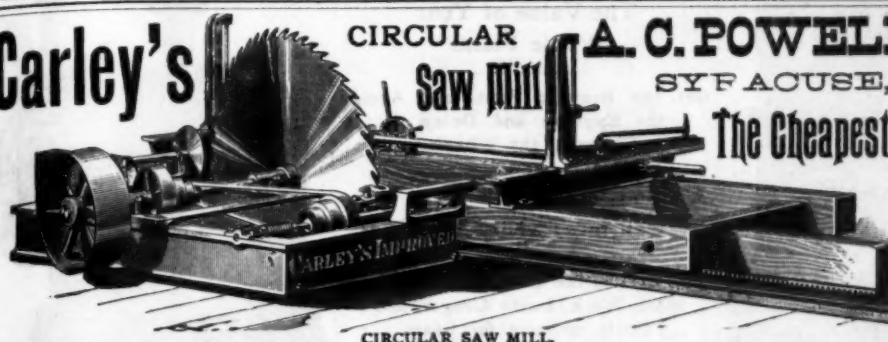
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SYRACUSE, N. Y.

The Cheapest and Best Mill

FOR THE MONEY IN
THE MARKET.

Prices, \$250 to \$600.

Write for terms and
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CIRCULAR SAW MILL.

BALL AUTOMATIC
CUT OFF ENGINE
MADE ONLY
BY
THE BALL ENGINE CO
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It will pay you to write to WILLIAMS ENGINE
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AUTOMATIC
ENGINES.

For any duty. Electric Light Engines a specialty.
Quality high. Prices moderate. Address
WILLIAMS ENGINE CO.
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TREVOR & CO.

Lockport, N. Y.

MANUFACTURERS OF

Shingle, Heading

—AND—
STAVE MACHINERY

AND SHINGLE AND HEADING SAWS.

HEADING SAWING MACHINES,

HEADING TURNERS,

VENEER CUTTING MACHINES,

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Lathes for turning handles for Brooms, Mops,
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If you want machinery for
Staves, Heading, Shingles or
Veneer Cutting, send for our
catalogue "A." If you want
Handle Machinery, send for
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Please say where you saw
this advertisement. Address

TREVOR & CO.

Lockport, N. Y.



The De Loach Variable Friction Feed.

A NEW AND VALUABLE DEVICE, SIMPLE AND EFFECTIVE.

\$200 Mill Cuts 10,000 Feet Per Day.
\$300 " " 20,000 " " "
\$400 " " 30,000 " " "



INCREASES CAPACITY FROM 25 TO 50 PER CENT. Has only been on the market one year, but has become
so popular that shipments are being made to all parts of the United States and inquiries coming from abroad.
With this mill, the feed can be under EASY AND PERFECT CONTROL. It is now the MOST POPULAR as well
as the MOST SALABLE mill in the market. Write for terms and illustrated catalogue of Saw Mills, Portable
Corn Mills, and De Loach Turbine Water Wheels, Mill Gearing, etc. We want Agents to represent us in
all parts of the Country. Special inducements given. Correspondence solicited. Mention this Paper.

DE LOACH MILL MFG. CO., Atlanta, Ga.

J. S. GRAHAM & CO.

261 LYELL AVENUE, ROCHESTER, N. Y.

Manufacturers of Planers and Matchers, Surfcers, Timber Planers, Resawing Machines, Gang Rippling
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Solid and Inserted Tooth, Circular, Shingle,
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Write for catalogue and prices.

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Wood-Working Machinery.

Circular Saw Mill Machinery, Clapboard and Lath Machinery, Planers, Matchers and
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for catalogue and estimates, stating exactly what is required. Largest machinery dealers
in the United States.

W. E. DREW, Agent,

S. C. FORSAITH MACHINE CO., Machinery and General Machinery Dealers, Manchester, N. H.



Subscribe to the Manufacturers' Record.

FLORENCE, ALA.

County Seat of Lauderdale County.

At Head of Navigation on Tennessee River, and at Foot of Muscle Shoals Canal,
which will be open Jan. 1st, 1888.

SITUATED on a gently undulating Plateau, 200 feet above high-water mark, surrounded by three large creeks of pure free-stone water. It has a Court House, Two Colleges, Four Public Schools, Six Churches, beautiful wide streets, graded and graveled, and shaded with forest trees; Hotels, fine store houses, Masonic, Odd Fellows, K. of H. and L. of H. lodges. A population of 2,500—moral, social and hospitable.

— The Scenery on Every Side is Picturesque and Beautiful. —

SO MUCH SO THAT IT IS CALLED BY VISITORS

FAIR FLORENCE."

There is no Place on the Continent more Healthful and Salubrious.

MANUFACTURES.

Within the last six months numerous manufactures have been located here, among the number:

Five Large Blast Furnaces,	One Saw Mill,	One Cotton Mill,	Two Brick Machines and
One Rolling Mill,	One Flour Mill,	One Cotton Compress and Ice	Three Hand-Brick Yards.
Three Planing Mills,	One Wooden-Ware Factory.	Factory.	

There are VAST BEDS OF IRON ORE within a few miles North and
IMMENSE COAL FIELDS SOUTH

ACCESSIBLE BY RAILROADS NOW BEING RAPIDLY CONSTRUCTED.

By the 1st of January the Nashville & Florence Railroad will be completed, making three lines of railroad, and the river, thus opening up VAST AREAS OF TIMBER, IRON ORE, COAL, Marble, Limestone, Kaolin, Fire-Clay, and almost every kind of mineral and product.

THE LANDS IN THE SURROUNDING COUNTRY ARE FERTILE AND PRODUCTIVE.

All kinds of Grain, Grasses and Fruits grow to perfection. Springs and Water Courses are numerous, and grazing for Cattle is abundant for eight months of the year.

Pamphlets and maps furnished on application to

Florence Land, Mining & Manufacturing Company.

ATHENS, East Tennessee,

THE COMING

→ Iron and Manufacturing City of the South. ←

Athens is the county seat of one of the most fertile counties in East Tennessee. The health of the city is unsurpassed, and is **ABSOLUTELY FREE FROM ALL MALARIAL OR EPIDEMIC DISEASES**. The surrounding scenery is very fine. From the main avenue the whole valley of East Tennessee can be seen, from the Cumberland Mountains on the west to the Great Smoky Mountains on the east; some of the tallest peaks east of the Rockies being in full view. **FINE MINERAL SPRINGS** are adjacent and are popular summer resorts. The society of Athens is excellent. A cordial welcome is extended to all law-abiding people locating in the town. The **EDUCATIONAL FACILITIES** are good. Beside public and preparatory schools, Athens is the seat of **THE GRANT MEMORIAL UNIVERSITY**, which has an enrollment of over 300, and whose graduates include some of the most distinguished citizens in the country. Among the industries and institutions of the place in active operation are:

THE ATHENS BUILDING & LOAN ASSOCIATION, \$250,000. **THE ATHENS WOOLEN MILLS, \$100,000.**

THE FIRST NATIONAL BANK, \$50,000.—To be increased at once.

FOUNDRY & MACHINE SHOPS, \$25,000.

FURNITURE WORKS, \$15,000.

FLOURING MILLS, \$20,000, etc.

500 men are now at work on the new railroad from Athens to the

RICHEST IRON FIELDS IN THE SOUTH

JUST EAST OF THE TOWN.

Only eight miles from Athens are **VEINS OF RED FOSSILIFEROUS ORE 11½ FEET THICK**, and 4 to 12 miles beyond are **THE LARGEST DEPOSITS OF BROWN ORES IN THE SOUTH**. The ores of both varieties, in addition to being inexhaustible, are both superior in quality to any ores of either variety at present mined in the South. An assertion that can be sustained. Coke can now be obtained at the lowest prices, and in addition a new railroad is now projected to the Cumberland Coal Fields, only 22 miles distant. These roads will give Athens **UNSURPASSED SHIPPING FACILITIES**. The road under construction will penetrate large deposits of Tennessee Variegated Marble; also an Unopened Timbered Region, and will develop the

Largest Colored Slate Deposits in the United States.

These quarries are now being opened, and are pronounced by experts Absolutely Inexhaustible, and equal in quality to the finest Vermont Colored Slate.

The ATHENS MINING & MANUFACTURING CO.

Have alone just contracted for the erection of over

\$500,000 IN NEW MANUFACTURING ENTERPRISES

At Athens, including a 100-ton Blast Furnace, cost \$200,000; Cotton Mills, cost \$150,000; Furniture Works, employing 200 men, cost \$100,000; Hotel, cost \$60,000; Water Works, Street Car Lines, &c. These improvements have been commenced which, added to other improvements projected, will add

\$1,000,000 OF NEW MANUFACTURING ENTERPRISES TO ATHENS.

The company desire to open correspondence with parties desiring to locate, and will extend liberal inducements in addition to gifts of sites in order to induce New Manufacturing Enterprises to locate in Athens. City property is doubling in value every few months, and at present low prices is beyond question a very fine investment.

The Athens Mining & Manufacturing Company,

R. L. BRIGHT, President.

R. J. FISHER, Secy. and Genl. Manager.

DECATUR, ALA.

Offers outside investors better inducements to locate than any other

 CITY IN THE SOUTH. 

AS A CITY OF

Mammoth MANUFACTURING Enterprises,

She has few equals and no superiors in the South.

There have been located at Decatur in the last few months the following Industries :

THE DECATUR LAND, IMPROVEMENT & FURNACE COMPANY. Has 50,000 ACRES of Iron, Coal, Mineral and Timber LANDS.

United States Rolling Stock Company's Plant, from Urbana, Ohio,
\$1,000,000.

Louisville & Nashville Railway Construction Shops, \$300,000.
Charcoal Company's plant, costing \$120,000.

A seventy-ton Charcoal Iron Furnace, costing \$190,000.

A one hundred-ton Blast Iron Furnace, costing \$225,000.

The Decatur Iron Bridge Construction Company; cost of plant, \$100,000.

The American Oak Extract Company's plant, costing \$60,000.

Ivins & Sons Steam Boiler and Engine Works, costing \$100,000.

Morse Cotton Compress plant, costing \$60,000.

Southern Horse Nail Company, \$100,000.

Decatur Lumber Company, Saw and Planing Mills, costing \$50,000.

Berthard & Co., Sash, Door and Blind Factory, cost \$15,000.

The Decatur Street Railway Company.

The Plumbers' Supply Co., \$25,000.

The Telephone Company.

The Alabama Lumber & Fruit Package Co.

Brush Electric Light Company, cost \$10,000.

The Ironton Wheelbarrow Company, cost \$25,000.

The St. Louis Investment Company, \$200,000.

Howland & Co's Water Works System, costing \$200,000.

Bleymeyer Artificial Ice Company, cost \$10,000.

Four Mammoth Brickyards.

Jones, Poley & Co's Lumber Yards.

The Hoosier Mills & Building Company.

The Gate City Sash & Door Company.

Decatur Car Wheel & Construction Company, \$60,000.

Arantz Bro's Mills and Lumber Yards.

Grant & Co's Furniture Factory.

Decatur Carriage Company.

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H. S. Freeman's Mills and Lumber Yards.

The Alabama Farmer's Friend Fence Machine Company.

The Decatur Artificial Stone Company.

Decatur Chain and Architectural Iron Works, capital \$100,000.

Natural Gas Company, capital \$200,000.

First National Bank, capital \$100,000.

The Exchange Bank of Decatur, capital \$100,000.

Merchants' Insurance Company, capital \$100,000.

Decatur Building Association, capital \$300,000.

Decatur Building Company, capital \$1,000,000.

Buchheit's Bottling Works.

Decatur Printing Company.

Two daily papers, three weekly papers.

Two hotels—one \$100,000, completed, and one \$300,000 being built; the largest in the South.

Grand Opera House, \$100,000.

THERE ARE OTHER

Mammoth Enterprises

Locating here, and contracts are being made with some of the most extensive industries in the United States.

Decatur is the Healthiest city in Alabama, the death rate among whites for 1886 being only 11 in 1,000.

Decatur Land, Improvement & Furnace Company.

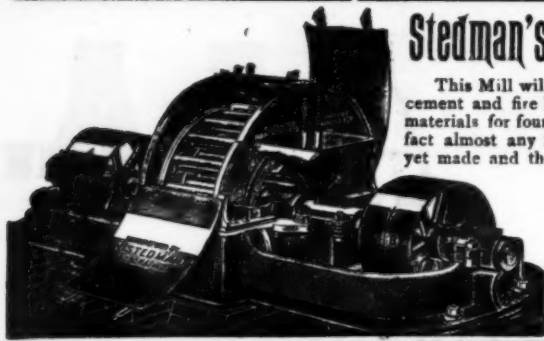
E. C. GORDON, President.

H. G. BOND, Vice-Prest. and Gen. Manager.

W. T. MULLIGAN, Secretary.

This Company has been pre-eminently successful in promoting the interests of the city of Decatur.

CORRESPONDENCE SOLICITED WITH PARTIES SEEKING LOCATIONS.

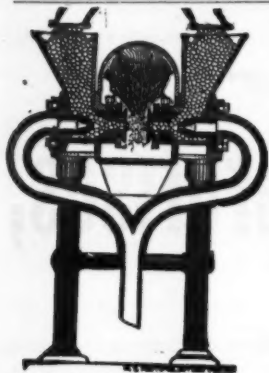


Stedman's Improved Disintegrator and Pulverizer.

This Mill will disintegrate or pulverize materials of all kinds, for brick and tile, for cement and fire brick, and slag from open air furnaces for use in rolling mills, and materials for foundry facings, iron ores, animal matter in almost all conditions,—in fact almost any material that can be disintegrated. It is an improvement over any yet made and the result of practical experience.

Send for Descriptive Circular.

STEDMAN'S
Foundry & Machine Works,
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Sectional View of Pulverizer.

PNEUMATIC PULVERIZER.

The principle of pulverization consists in the employment of

TWO POWERFUL OPPOSING CURRENTS

of dry super-heated steam, so arranged that they continuously charge themselves with crushed or granulated material, and by the great force and velocity of the steam currents the minerals are dashed against each other with such power of concussion as to cause the hardest ores to be pulverized to any degree of fineness desired. The high temperature of the super-heated steam currents employed, through which every minute particle of ore must pass, causes them to become very hot and dry, which produces a beneficial effect upon sulphurets and ores containing rusty gold. The light weight and simplicity of construction of the Pulverizer, the extremely small and inexpensive wearing parts are the WONDER and SURPRISE of all who witness its operation. The Company are prepared to furnish complete plants for pulverizing

10 to 200 Tons Per Day,

including a Sectional Steam Boiler supplying all the power required.

PNEUMATIC PULVERIZER COMPANY,

L. F. HOLMAN, Pres.

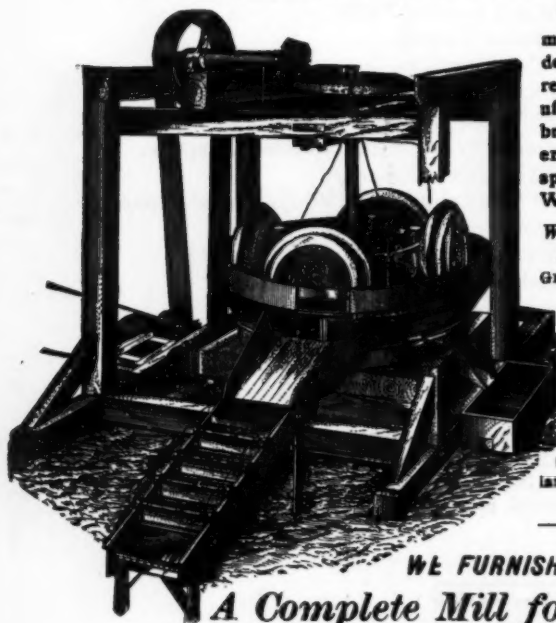
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WISWELL

Ore Pulverizer and Amalgamator COMBINED.



The following testimonial from Mr. Marsden, of the firm of Farrel & Marsden, manufacturers of stone-breakers & ore-crushers, Ansonia, Conn., speaks volumes for the Wiswell Mill:

Wiswell Electric Mining Machinery Co.:

GENTLEMEN: After carefully inspecting your mill and seeing it in operation, I do not hesitate to say that it is one of the best, if not the best pulverizer and most complete gold saving machine I have ever seen.

Please accept congratulations for your success.
S. L. MARSDEN.

WE FURNISH

A Complete Mill for \$2,500.

DELIVERED ON BOARD CARS.

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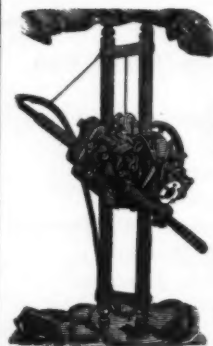
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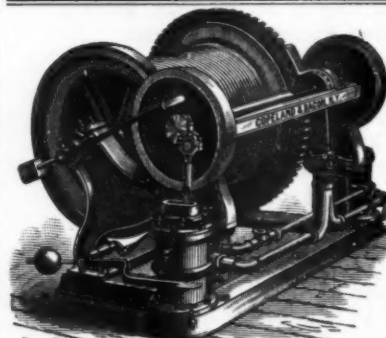


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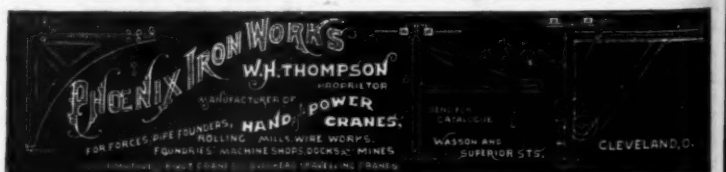
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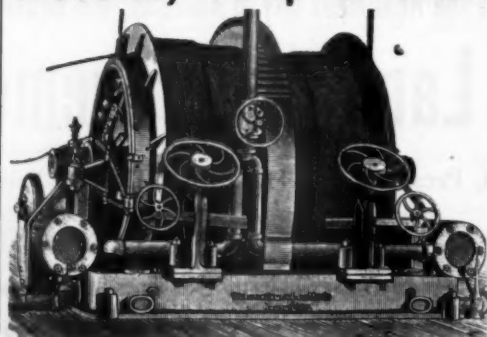
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TRADE NOTES.

OWING to increase of business and the consequent necessity of greater accommodation, the Chalmers-Spence Co. will on May 1st remove their Chicago warehouses from No. 144 to No. 86 Lake street.

THE Universal Radial Drill Co., Cincinnati, Ohio, have received an order from the government for a triple radial drill, to go to the Portsmouth navy yards, and also a suspended drill to the same place.

THE Curtis Regulator Co., of Boston, Mass., have recently sold the Maginnis Oil & Soap Works, New Orleans, La., one of their pressure regulators. The purchasers report that it has given entire satisfaction.

LOOM PICKER CO., Biddeford, Me., reports business good in its loom harness department. Recent shipments of harnesses were made to Eagle & Phoenix Manufacturing Co. and Muscogee Manufacturing Co., Columbus, Ga.; Lane Mills, New Orleans.

THE Ingersoll Rock Drill Co., 10 Park Place, N. Y., have shipped by the steamer "Comorin," to be exhibited at the International Exhibition, Barcelona, Spain, a line of mining machinery, with catalogues and circulars printed in English, French and Spanish languages. The exhibition opens early in May and will continue about six months.

THE York Manufacturing Co., York, Pa., have erected a 5-ton improved York ice machine for Greensboro (N. C.) Ice Co., who report that the machine works like a charm, making clear and solid ice. This company are making a number of ice and refrigerating machines to go South. Ice factories should have their catalogue—sent free.

THE Clifton Manufacturing Co., of Clifton, S. C., who are now building one of the finest mills in the South, have placed their order with the Harrison Safety Boiler Works, Germantown Junction, Philadelphia, for a battery of four boilers of 75 horse-power each, and a Cochran feed water heater and purifier of sufficient capacity for the entire plant.

CLEVELAND & HARDWICK, proprietors of the Erie City Engine Works, at Erie, Pa., have gotten out a handsome folder of their full line of engines and boilers. Their sales cover the whole country, and are growing in volume daily. Their new revised catalogue and price-list is now in the hands of the printer. If you have not seen it, send your name and address on a postal card, and a copy will be mailed promptly.

CHAR. A. SCHIEREN & Co. report recent sales of their leather link belting to the following: Parkhill Manufacturing Co., Fitchburg, Mass.; Standard Oil Co. of New York, 26 Broadway, N. Y.; G. H. Nichols & Co., Brooklyn, N. Y.; Careleton & Cole, Port Huron, Mich.; Sutton Bros. & Bell, Indiana, Pa.; Goodyear Rubber Co., Milwaukee, Wis.; The F. Gray Co., Piqua, Ohio; Watertown Paper Co., Watertown, N. Y.

ONE of the correspondents of the New York Belting & Packing Co. says: "Your special Vulcanite emery wheel for wet tool grinding is the best in the world for that purpose. We fully guarantee it every time. One wheel in use under our observation has run eighteen months, and only lost an eighth of an inch during that time. Two or three of the ordinary emery wheels would have been consumed in the same time." The theory is, that the rubber in the Vulcanite wheel holds the emery better to its position and less waste occurs; this, in conjunction with the fact that only the best Wellington emery is employed in the manufacture of the Vulcanite wheel, which no doubt has a great deal to do with its longevity.

THE "Special No. 3" Perfection brick press referred to in our former issue, then in construction at the works of C. W. Raymond & Co., Dayton, O., has been completed, and more than meets the expectation of its projectors. It is a big machine, weighing about 1,400 pounds. It has unlimited power for hand work. A die as large as 18x18 inches can be used upon it. Additional ones will be constructed immediately.

THE Warren Glass Works, of Cumberland, Md., is running full force. They make every descriptive glassware article known to the trade. Their bottles are specially fine and durable. Their New York trade is constantly increasing, so much so that their capacity is not sufficiently large enough to supply the demand made for them, consequently they will add a new edition. Those in need of good glassware should write to L. P. Whitman, general manager of the Warren Glass Works, Cumberland, Md.

MORSE, WILLIAMS & Co., Philadelphia, have recently erected their Albro-Hindley screw elevators in buildings for Wm. Cameron & Bro. and S. W. Venable & Co., Petersburg, Va.; Geo. F. Newell & Bro., Richmond, and also shipped them to Cannon Manufacturing Co., Concord, N. C.; Tallassee Falls Manufacturing Co., Tallassee Falls, Ala.; J. B. Pace Tobacco Co., Richmond, and have orders on their books from Knoxville Woolen Mills, Fite Buildings, Nashville, Tenn., and James D. Mason & Co., of this city.

MR. F. H. CRAFTS, the genial manager of the wood-working machinery department of E. & B. Holmes, of Buffalo, N. Y., and formerly connected with Goodell & Waters and J. S. Graham & Co., is now South in the interests of the new concern, who are turning out the highest grade of improved rotary cutting tools. Their patterns are all new—nothing cheap or old. The new band re-saw and scroll saw combined and circular re-saw are finding favor with all wood-workers. Spring catalogues now out, and will be sent upon application.

THE Acme Machinery Co., Cleveland, O., call the attention of purchasers to their new 80-page catalogue, descriptive of bolt cutters, nut tappers and special machinery. This catalogue contains a full set of diagrams, clearly setting forth the advantages of the Acme head, and gives dimensions and prices of same. It also contains cuts of bolt cutters, nut tappers, pointers and screw threads, with sufficient information as to power, capacity, price, &c., to allow a selection to be made without a personal inspection. Send to this enterprising firm for a copy.

LOCKWOOD, GREENE & Co., mill engineers, of Newburyport, Mass., are making plans for the complete arrangement of buildings, water-power, machinery, and shafting for the Oldtown Woolen Co. at Oldtown, Me. It is possible that the main power will be transmitted by ropes. They are also making plans for the construction of the extension to the Lockwood Mills, at Waterville, Me., and for the arrangement of machinery, shafting, etc. Plans too have been made for the 10,000-spindle yarn mill for the Whitney Manufacturing Co., Spartanburg, S. C., and for the canal, dam, head gates, arrangement of water wheels, construction of building, and arrangement of machinery, shafting, etc. The main power will be transmitted from wheels to mill by means of ropes instead of belts. In addition to the above, they have just completed plans for the rearrangement of weaving machinery, shafting, etc., for the Hamilton Mills, Amesbury, Mass., and for the large extension to the plant of the Plymouth Cordage Co., of Plymouth, Mass. This company is now using ropes for the transmission of all of its power in the mill, and the rope-driving system will be extended so as to include the enlargement of the mill.

THE Toledo Carriage & Variety Iron Works (Geo. W. Heartley, proprietor), Toledo, Ohio, call the attention of manufacturers to the fact that they are now engaged in the manufacture of special machinery for making iron and steel wheels used in wheelbarrows, baby carriages, small wagons, agricultural implements, etc.; also punches and shears (both hand and power) of various sizes for special purposes, tire upsetters and special tools for blacksmiths and wheelwrights. A new illustrated catalogue and price-list will shortly be issued; sent free to those who apply.

THE increased demand for the blowers, engines portable forges, steam hot blast apparatus, etc., manufactured by B. F. Starlevant, of Boston, Mass., has necessitated the establishment of a branch store at 75 Queen Victoria street, London. Mr. George A. Mower, a young and enterprising American, and a graduate of the Massachusetts Institute of Technology, has charge of this house, and is meeting with marked success in the introduction of these goods. The trade of Continental Europe is in the hands of another house at Hamburg, Germany, and that of Australia is carried on through a house at Sydney, New South Wales. Within the few past weeks shipments have been made to St. Petersburg, Russia, and Yokohama, Japan, the latter being a second order.

THE extensive loom business of the late George Crompton, of Worcester, Mass., has been incorporated for the purpose of manufacturing textile machinery under the name of Crompton Loom Works, and the new corporation commences with the most flattering prospects. In the official management of the works all the experienced men whom the late George Crompton gathered about him, and in whom he placed important trusts, have been retained. The works were never so well prepared as at present, in machinery and other equipment, to handle large contracts, and to maintain its well-established reputation for turning out first-class machines. Unremitting efforts in late years with a view to pleasing manufacturers, and a determination to furnish the very best and most perfected machinery attainable, have brought the standard of the product of these works to that high plane so well known to manufacturers. These efforts will be assiduously maintained and demonstrated practical improvements will be constantly added as the result of a fixed purpose to supply manufacturers with the best equivalent for their patronage.

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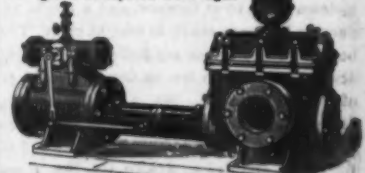
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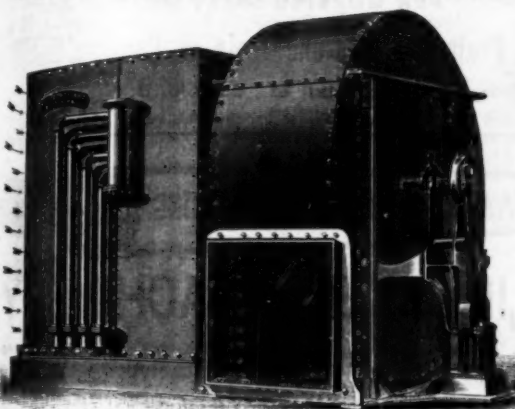
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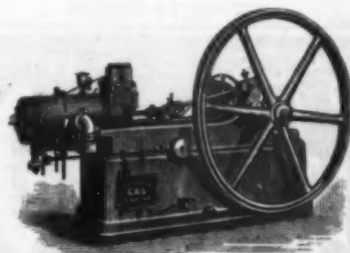
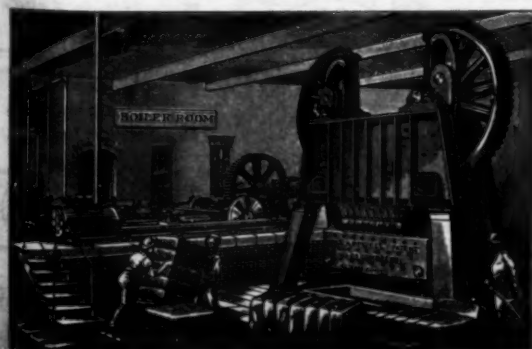
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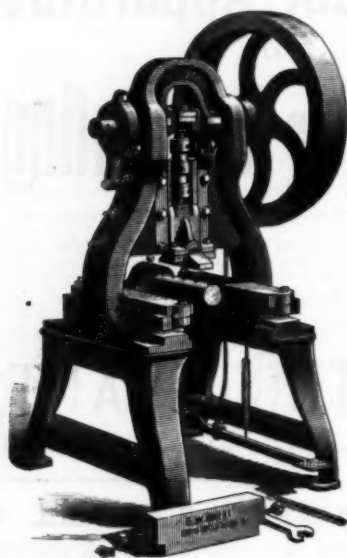
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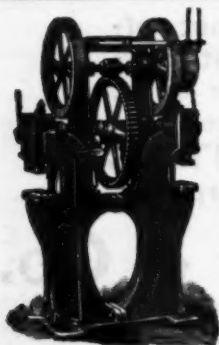
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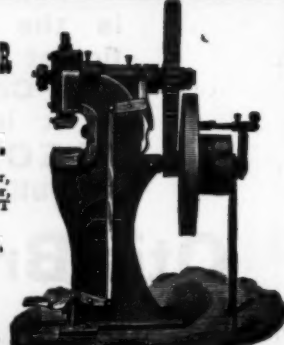
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Eagle, 3/4-inch Roll.....dis 20¢ to 30¢
Eagle, 1-inch Roll.....dis 20¢ to 30¢
Crown, 1/4-inch, 3/8-inch, 1/2-inch, 3/4-inch, 1-inch, 1 1/4-inch, 1 1/2-inch, 1 3/4-inch, 2-inch, 2 1/4-inch, 2 1/2-inch, 2 3/4-inch, 3-inch, 3 1/4-inch, 3 1/2-inch, 3 3/4-inch, 4-inch, 4 1/4-inch, 4 1/2-inch, 4 3/4-inch, 5-inch, 5 1/4-inch, 5 1/2-inch, 5 3/4-inch, 6-inch, 6 1/4-inch, 6 1/2-inch, 6 3/4-inch, 7-inch, 7 1/4-inch, 7 1/2-inch, 7 3/4-inch, 8-inch, 8 1/4-inch, 8 1/2-inch, 8 3/4-inch, 9-inch, 9 1/4-inch, 9 1/2-inch, 9 3/4-inch, 10-inch, 10 1/4-inch, 10 1/2-inch, 10 3/4-inch, 11-inch, 11 1/4-inch, 11 1/2-inch, 11 3/4-inch, 12-inch, 12 1/4-inch, 12 1/2-inch, 12 3/4-inch, 13-inch, 13 1/4-inch, 13 1/2-inch, 13 3/4-inch, 14-inch, 14 1/4-inch, 14 1/2-inch, 14 3/4-inch, 15-inch, 15 1/4-inch, 15 1/2-inch, 15 3/4-inch, 16-inch, 16 1/4-inch, 16 1/2-inch, 16 3/4-inch, 17-inch, 17 1/4-inch, 17 1/2-inch, 17 3/4-inch, 18-inch, 18 1/4-inch, 18 1/2-inch, 18 3/4-inch, 19-inch, 19 1/4-inch, 19 1/2-inch, 19 3/4-inch, 20-inch, 20 1/4-inch, 20 1/2-inch, 20 3/4-inch, 21-inch, 21 1/4-inch, 21 1/2-inch, 21 3/4-inch, 22-inch, 22 1/4-inch, 22 1/2-inch, 22 3/4-inch, 23-inch, 23 1/4-inch, 23 1/2-inch, 23 3/4-inch, 24-inch, 24 1/4-inch, 24 1/2-inch, 24 3/4-inch, 25-inch, 25 1/4-inch, 25 1/2-inch, 25 3/4-inch, 26-inch, 26 1/4-inch, 26 1/2-inch, 26 3/4-inch, 27-inch, 27 1/4-inch, 27 1/2-inch, 27 3/4-inch, 28-inch, 28 1/4-inch, 28 1/2-inch, 28 3/4-inch, 29-inch, 29 1/4-inch, 29 1/2-inch, 29 3/4-inch, 30-inch, 30 1/4-inch, 30 1/2-inch, 30 3/4-inch, 31-inch, 31 1/4-inch, 31 1/2-inch, 31 3/4-inch, 32-inch, 32 1/4-inch, 32 1/2-inch, 32 3/4-inch, 33-inch, 33 1/4-inch, 33 1/2-inch, 33 3/4-inch, 34-inch, 34 1/4-inch, 34 1/2-inch, 34 3/4-inch, 35-inch, 35 1/4-inch, 35 1/2-inch, 35 3/4-inch, 36-inch, 36 1/4-inch, 36 1/2-inch, 36 3/4-inch, 37-inch, 37 1/4-inch, 37 1/2-inch, 37 3/4-inch, 38-inch, 38 1/4-inch, 38 1/2-inch, 38 3/4-inch, 39-inch, 39 1/4-inch, 39 1/2-inch, 39 3/4-inch, 40-inch, 40 1/4-inch, 40 1/2-inch, 40 3/4-inch, 41-inch, 41 1/4-inch, 41 1/2-inch, 41 3/4-inch, 42-inch, 42 1/4-inch, 42 1/2-inch, 42 3/4-inch, 43-inch, 43 1/4-inch, 43 1/2-inch, 43 3/4-inch, 44-inch, 44 1/4-inch, 44 1/2-inch, 44 3/4-inch, 45-inch, 45 1/4-inch, 45 1/2-inch, 45 3/4-inch, 46-inch, 46 1/4-inch, 46 1/2-inch, 46 3/4-inch, 47-inch, 47 1/4-inch, 47 1/2-inch, 47 3/4-inch, 48-inch, 48 1/4-inch, 48 1/2-inch, 48 3/4-inch, 49-inch, 49 1/4-inch, 49 1/2-inch, 49 3/4-inch, 50-inch, 50 1/4-inch, 50 1/2-inch, 50 3/4-inch, 51-inch, 51 1/4-inch, 51 1/2-inch, 51 3/4-inch, 52-inch, 52 1/4-inch, 52 1/2-inch, 52 3/4-inch, 53-inch, 53 1/4-inch, 53 1/2-inch, 53 3/4-inch, 54-inch, 54 1/4-inch, 54 1/2-inch, 54 3/4-inch, 55-inch, 55 1/4-inch, 55 1/2-inch, 55 3/4-inch, 56-inch, 56 1/4-inch, 56 1/2-inch, 56 3/4-inch, 57-inch, 57 1/4-inch, 57 1/2-inch, 57 3/4-inch, 58-inch, 58 1/4-inch, 58 1/2-inch, 58 3/4-inch, 59-inch, 59 1/4-inch, 59 1/2-inch, 59 3/4-inch, 60-inch, 60 1/4-inch, 60 1/2-inch, 60 3/4-inch, 61-inch, 61 1/4-inch, 61 1/2-inch, 61 3/4-inch, 62-inch, 62 1/4-inch, 62 1/2-inch, 62 3/4-inch, 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3/4-inch, 84-inch, 84 1/4-inch, 84 1/2-inch, 84 3/4-inch, 85-inch, 85 1/4-inch, 85 1/2-inch, 85 3/4-inch, 86-inch, 86 1/4-inch, 86 1/2-inch, 86 3/4-inch, 87-inch, 87 1/4-inch, 87 1/2-inch, 87 3/4-inch, 88-inch, 88 1/4-inch, 88 1/2-inch, 88 3/4-inch, 89-inch, 89 1/4-inch, 89 1/2-inch, 89 3/4-inch, 90-inch, 90 1/4-inch, 90 1/2-inch, 90 3/4-inch, 91-inch, 91 1/4-inch, 91 1/2-inch, 91 3/4-inch, 92-inch, 92 1/4-inch, 92 1/2-inch, 92 3/4-inch, 93-inch, 93 1/4-inch, 93 1/2-inch, 93 3/4-inch, 94-inch, 94 1/4-inch, 94 1/2-inch, 94 3/4-inch, 95-inch, 95 1/4-inch, 95 1/2-inch, 95 3/4-inch, 96-inch, 96 1/4-inch, 96 1/2-inch, 96 3/4-inch, 97-inch, 97 1/4-inch, 97 1/2-inch, 97 3/4-inch, 98-inch, 98 1/4-inch, 98 1/2-inch, 98 3/4-inch, 99-inch, 99 1/4-inch, 99 1/2-inch, 99 3/4-inch, 100-inch, 100 1/4-inch, 100 1/2-inch, 100 3/4-inch, 101-inch, 101 1/4-inch, 101 1/2-inch, 101 3/4-inch, 102-inch, 102 1/4-inch, 102 1/2-inch, 102 3/4-inch, 103-inch, 103 1/4-inch, 103 1/2-inch, 103 3/4-inch, 104-inch, 104 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123 1/2-inch, 123 3/4-inch, 124-inch, 124 1/4-inch, 124 1/2-inch, 124 3/4-inch, 125-inch, 125 1/4-inch, 125 1/2-inch, 125 3/4-inch, 126-inch, 126 1/4-inch, 126 1/2-inch, 126 3/4-inch, 127-inch, 127 1/4-inch, 127 1/2-inch, 127 3/4-inch, 128-inch, 128 1/4-inch, 128 1/2-inch, 128 3/4-inch, 129-inch, 129 1/4-inch, 129 1/2-inch, 129 3/4-inch, 130-inch, 130 1/4-inch, 130 1/2-inch, 130 3/4-inch, 131-inch, 131 1/4-inch, 131 1/2-inch, 131 3/4-inch, 132-inch, 132 1/4-inch, 132 1/2-inch, 132 3/4-inch, 133-inch, 133 1/4-inch, 133 1/2-inch, 133 3/4-inch, 134-inch, 134 1/4-inch, 134 1/2-inch, 134 3/4-inch, 135-inch, 135 1/4-inch, 135 1/2-inch, 135 3/4-inch, 136-inch, 136 1/4-inch, 136 1/2-inch, 136 3/4-inch, 137-inch, 137 1/4-inch, 137 1/2-inch, 137 3/4-inch, 138-inch, 138 1/4-inch, 138 1/2-inch, 138 3/4-inch, 139-inch, 139 1/4-inch, 139 1/2-inch, 139 3/4-inch, 140-inch, 140 1/4-inch, 140 1/2-inch, 140 3/4-inch, 141-inch, 141 1/4-inch, 141 1/2-inch, 141 3/4-inch, 142-inch, 142 1/4-inch, 142 1/2-inch, 142 3/4-inch, 143-inch, 143 1/4-inch, 143 1/2-inch, 143 3/4-inch, 144-inch, 144 1/4-inch, 144 1/2-inch, 144 3/4-inch, 145-inch, 145 1/4-inch, 145 1/2-inch, 145 3/4-inch, 146-inch, 146 1/4-inch, 146 1/2-inch, 146 3/4-inch, 147-inch, 147 1/4-inch, 147 1/2-inch, 147 3/4-inch, 148-inch, 148 1/4-inch, 148 1/2-inch, 148 3/4-inch, 149-inch, 149 1/4-inch, 149 1/2-inch, 149 3/4-inch, 150-inch, 150 1/4-inch, 150 1/2-inch, 150 3/4-inch, 151-inch, 151 1/4-inch, 151 1/2-inch, 151 3/4-inch, 152-inch, 152 1/4-inch, 152 1/2-inch, 152 3/4-inch, 153-inch, 153 1/4-inch, 153 1/2-inch, 153 3/4-inch, 154-inch, 154 1/4-inch, 154 1/2-inch, 154 3/4-inch, 155-inch, 155 1/4-inch, 155 1/2-inch, 155 3/4-inch, 156-inch, 156 1/4-inch, 156 1/2-inch, 156 3/4-inch, 157-inch, 157 1/4-inch, 157 1/2-inch, 157 3/4-inch, 158-inch, 158 1/4-inch, 158 1/2-inch, 158 3/4-inch, 159-inch, 159 1/4-inch, 159 1/2-inch, 159 3/4-inch, 160-inch, 160 1/4-inch, 160 1/2-inch, 160 3/4-inch, 161-inch, 161 1/4-inch, 161 1/2-inch, 161 3/4-inch, 162-inch, 162 1/4-inch, 162 1/2-inch, 162 3/4-inch, 163-inch, 163 1/4-inch, 163 1/2-inch, 163 3/4-inch, 164-inch, 164 1/4-inch, 164 1/2-inch, 164 3/4-inch, 165-inch, 165 1/4-inch, 165 1/2-inch, 165 3/4-inch, 166-inch, 166 1/4-inch, 166 1/2-inch, 166 3/4-inch, 167-inch, 167 1/4-inch, 167 1/2-inch, 167 3/4-inch, 168-inch, 168 1/4-inch, 168 1/2-inch, 168 3/4-inch, 169-inch, 169 1/4-inch, 169 1/2-inch, 169 3/4-inch, 170-inch, 170 1/4-inch, 170 1/2-inch, 170 3/4-inch, 171-inch, 171 1/4-inch, 171 1/2-inch, 171 3/4-inch, 172-inch, 172 1/4-inch, 172 1/2-inch, 172 3/4-inch, 173-inch, 173 1/4-inch, 173 1/2-inch, 173 3/4-inch, 174-inch, 174 1/4-inch, 174 1/2-inch, 174 3/4-inch, 175-inch, 175 1/4-inch, 175 1/2-inch, 175 3/4-inch, 176-inch, 176 1/4-inch, 176 1/2-inch, 176 3/4-inch, 177-inch, 177 1/4-inch, 177 1/2-inch, 177 3/4-inch, 178-inch, 178 1/4-inch, 178 1/2-inch, 178 3/4-inch, 179-inch, 179 1/4-inch, 179 1/2-inch, 179 3/4-inch, 180-inch, 180 1/4-inch, 180 1/2-inch, 180 3/4-inch, 181-inch, 181 1/4-inch, 181 1/2-inch, 181 3/4-inch, 182-inch, 182 1/4-inch, 182 1/2-inch, 182 3/4-inch, 183-inch, 183 1/4-inch, 183 1/2-inch, 183 3/4-inch, 184-inch, 184 1/4-inch, 184 1/2-inch, 184 3/4-inch, 185-inch, 185 1/4-inch, 185 1/2-inch, 185 3/4-inch, 186-inch, 186 1/4-inch, 186 1/2-inch, 186 3/4-inch, 187-inch, 187 1/4-inch, 187 1/2-inch, 187 3/4-inch, 188-inch, 188 1/4-inch, 188 1/2-inch, 188 3/4-inch, 189-inch, 189 1/4-inch, 189 1/2-inch, 189 3/4-inch, 190-inch, 190 1/4-inch, 190 1/2-inch, 190 3/4-inch, 191-inch, 191 1/4-inch, 191 1/2-inch, 191 3/4-inch, 192-inch, 192 1/4-inch, 192 1/2-inch, 192 3/4-inch, 193-inch, 193 1/4-inch, 193 1/2-inch, 193 3/4-inch, 194-inch, 194 1/4-inch, 194 1/2-inch, 194 3/4-inch, 195-inch, 195 1/4-inch, 195 1/2-inch, 195 3/4-inch, 196-inch, 196 1/4-inch, 196 1/2-inch, 196 3/4-inch, 197-inch, 197 1/4-inch, 197 1/2-inch, 197 3/4-inch, 198-inch, 198 1/4-inch, 198 1/2-inch, 198 3/4-inch, 199-inch, 199 1/4-inch, 199 1/2-inch, 199 3/4-inch, 200-inch, 200 1/4-inch, 200 1/2-inch, 200 3/4-inch, 201-inch, 201 1/4-inch, 201 1/2-inch, 201 3/4-inch, 202-inch, 202 1/4-inch, 202 1/2-inch, 202 3/4-inch, 203-inch, 203 1/4-inch, 203 1/2-inch, 203 3/4-inch, 204-inch, 204 1/4-inch, 204 1/2-inch, 204 3/4-inch, 205-inch, 205 1/4-inch, 205 1/2-inch, 205 3/4-inch, 206-inch, 206 1/4-inch, 206 1/2-inch, 206 3/4-inch, 207-inch, 207 1/4-inch, 207 1/2-inch, 207 3/4-inch, 208-inch, 208 1/4-inch, 208 1/2-inch, 208 3/4-inch, 209-inch, 209 1/4-inch, 209 1/2-inch, 209 3/4-inch, 210-inch, 210 1/4-inch, 210 1/2-inch, 210 3/4-inch, 211-inch, 211 1/4-inch, 211 1/2-inch, 211 3/4-inch, 212-inch, 212 1/4-inch, 212 1/2-inch, 212 3/4-inch, 213-inch, 213 1/4-inch, 213 1/2-inch, 213 3/4-inch, 214-inch, 214 1/4-inch, 214 1/2-inch, 214 3/4-inch, 215-inch, 215 1/4-inch, 215 1/2-inch, 215 3/4-inch, 216-inch, 216 1/4-inch, 216 1/2-inch, 216 3/4-inch, 217-inch, 217 1/4-inch, 217 1/2-inch, 217 3/4-inch, 218-inch, 218 1/4-inch, 218 1/2-inch, 218 3/4-inch, 219-inch, 219 1/4-inch, 219 1/2-inch, 219 3/4-inch, 220-inch, 220 1/4-inch, 220 1/2-inch, 220 3/4-inch, 221-inch, 221 1/4-inch, 221 1/2-inch, 221 3/4-inch, 222-inch, 222 1/4-inch, 222 1/2-inch, 222 3/4-inch, 223-inch, 223 1/4-inch, 223 1/2-inch, 223 3/4-inch, 224-inch, 224 1/4-inch, 224 1/2-inch, 224 3/4-inch, 225-inch, 225 1/4-inch, 225 1/2-inch, 225 3/4-inch, 226-inch, 226 1/4-inch, 226 1/2-inch, 226 3/4-inch, 227-inch, 227 1/4-inch, 227 1/2-inch, 227 3/4-inch, 228-inch, 228 1/4-inch, 228 1/2-inch, 228 3/4-inch, 229-inch, 229 1/4-inch, 229 1/2-inch, 229 3/4-inch, 230-inch, 230 1/4-inch, 230 1/2-inch, 230 3/4-inch, 231-inch, 231 1/4-inch, 231 1/2-inch, 231 3/4-inch, 232-inch, 232 1/4-inch, 232 1/2-inch, 232 3/4-inch, 233-inch, 233 1/4-inch, 233 1/2-inch, 233 3/4-inch, 234-inch, 234 1/4-inch, 234 1/2-inch, 234 3/4-inch, 235-inch, 235 1/4-inch, 235 1/2-inch, 235 3/4-inch, 236-inch, 236 1/4-inch, 236 1/2-inch, 236 3/4-inch, 237-inch, 237 1/4-inch, 237 1/2-inch, 237 3/4-inch, 238-inch, 238 1/4-inch, 238 1/2-inch, 238 3/4-inch, 239-inch, 239 1/4-inch, 239 1/2-inch, 239 3/4-inch, 240-inch, 240 1/4-inch, 240 1/2-inch, 240 3/4-inch, 241-inch, 241 1/4-inch, 241 1/2-inch, 241 3/4-inch, 242-inch, 242 1/4-inch, 242 1/2-inch, 242 3/4-inch, 243-inch, 243 1/4-inch, 243 1/2-inch, 243 3/4-inch, 244-inch, 244 1/4-inch, 244 1/2-inch, 244 3/4-inch, 245-inch, 245 1/4-inch, 245 1/2-inch, 245 3/4-inch, 246-inch, 246 1/4-inch, 246 1/2-inch, 246 3/4-inch, 247-inch, 247 1/4-inch, 247 1/2-inch, 247 3/4-inch, 248-inch, 248 1/4-inch, 248 1/2-inch, 248 3/4-inch, 249-inch, 249 1/4-inch, 249 1/2-inch, 249 3/4-inch, 250-inch, 250 1/4-inch, 250 1/2-inch, 250 3/4-inch, 251-inch, 251 1/4-inch, 251 1/2-inch, 251 3/4-inch, 252-inch, 252 1/4-inch, 252 1/2-inch, 252 3/4-inch, 253-inch, 253 1/4-inch, 253 1/2-inch, 253 3/4-inch, 254-inch, 254 1/4-inch, 254 1/2-inch, 254 3/4-inch, 255-inch, 255 1/4-inch, 255 1/2-inch, 255 3/4-inch, 256-inch, 256 1/4-inch, 256 1/2-inch, 256 3/4-inch, 257-inch, 257 1/4-inch, 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Leathered Carpet Tacks..... 100 lbs 10
Brush Tacks..... 100 lbs 10
TAP NAILS.
Common and Ring..... 100 lbs 10
Iron Top Borers..... 100 lbs 10
Enterprise Mfg. Co..... 100 lbs 10
TOBACCO CUTTERS.
Enterprise Mfg. Co (Champion)..... 100 lbs 10
Wood Bottom..... 100 lbs 10
1/2 Iron..... 100 lbs 10
THERMOMETERS.
The Case..... 100 lbs 10
Therm Glasses..... 100 lbs 10
TONG CALKS.
Wristed..... 100 lbs 10
TRAPE.
Game, Newhouse..... 100 lbs 10
Game, Onida Pattern..... 100 lbs 10
Game, Blake's Patent..... 100 lbs 10
Mouse, Wood, Choker..... 100 lbs 10
Mouse, Round Wire..... 100 lbs 10
Mouse Cage, Wire..... 100 lbs 10
Mouse, Catch-em-alive..... 100 lbs 10
Cyclon Mouse..... 100 lbs 10
Ideal Mouse..... 100 lbs 10
Rat, "Decoy"..... 100 lbs 10
Delusion Mouse, per doz..... 100 lbs 10
Ideal..... 100 lbs 10
TROWELS.
Lothrop's Brick and Plastering..... 100 lbs 10
Reed's Brick and Plastering..... 100 lbs 10
Diston's Brick and Plastering..... 100 lbs 10
Clement & Maynard's..... 100 lbs 10
Worral's Brick..... 100 lbs 10
Bradley & Walby's..... 100 lbs 10
Garden..... 100 lbs 10
Kee's Brick..... 100 lbs 10
TRUCKS (WAREHOUSE, AC.)
Handy Truck..... 100 lbs 10
Perfield Block Co's list, 1886..... 100 lbs 10
Perfield, with Cogs, No. 4..... 100 lbs 10
Eureka, No. 8..... 100 lbs 10
VISES.
Chester's Combined Vise and Anvil..... 100 lbs 10
Solid Box—Wilson's..... 100 lbs 10
"Trenton..... 100 lbs 10
"Iron City Tool Works..... 100 lbs 10
Manner Drill Mfg. Co's—
Machinist's Vise..... 100 lbs 10
Bench—Wilson's..... 100 lbs 10
"Trenton..... 100 lbs 10
"Parker's..... 100 lbs 10
"Frost's..... 100 lbs 10
"Bonney's..... 100 lbs 10
Well Wheels..... 100 lbs 10
Stephen's Patent Vises..... 100 lbs 10
WIRE.
Brass and Copper, list of Jan. 27, 1886..... 100 lbs 10
Bright and Annealed..... 100 lbs 10
Bright and Annealed..... 100 lbs 10
Bright and Annealed..... 100 lbs 10
Coppered..... 100 lbs 10
Galvanized, Nos. 0 to 18..... 100 lbs 10
Tinned, Nos. 0 to 18..... 100 lbs 10
Tinned Broom Wire, Nos. 18 to 25..... 100 lbs 10
Annealed Fence, Nos. 10 to 14..... 100 lbs 10
Annealed Grape, Nos. 10 to 14..... 100 lbs 10
Fence Staples, Galvanized..... 100 lbs 10
Japanese Barb Fence..... 100 lbs 10
Galvanized Barbed Fence..... 100 lbs 10
Buck Thorn Galvanized..... 100 lbs 10
Picture Wire..... 100 lbs 10
Jothas Line Wire, Galvanized..... 100 lbs 10
Wire Cloth, galv, drab and black..... 100 lbs 10
WIRE NAILS.
Standard Penny Nails..... 100 lbs 10
Wire Nail List, April 13, 1886..... 100 lbs 10
WRENCHES.
American Adjustable..... 100 lbs 10
Baxter's Adjustable "S," list Jan., 1886..... 100 lbs 10
Baxter's Diagonal..... 100 lbs 10
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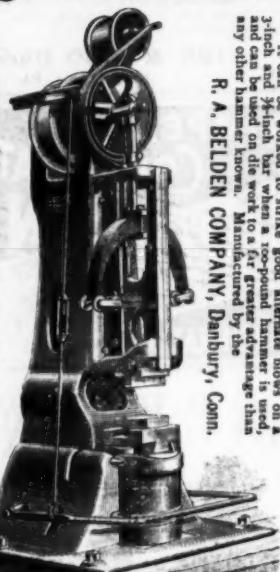
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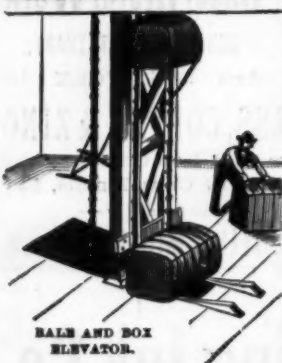
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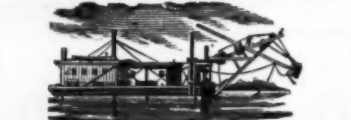


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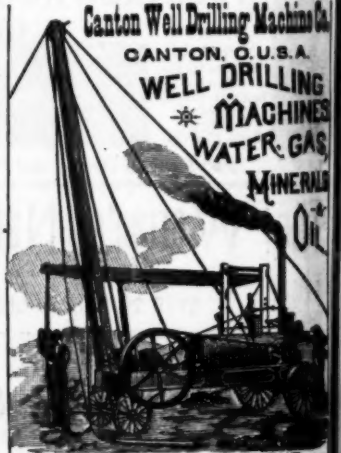
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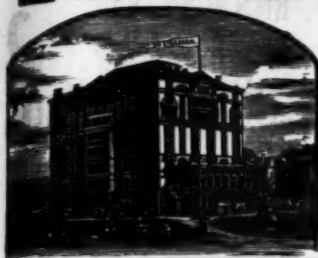
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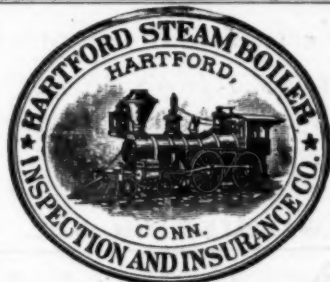


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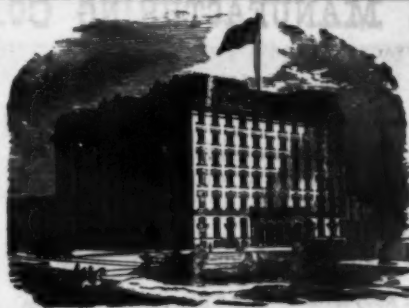
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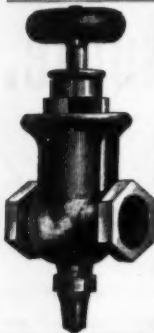
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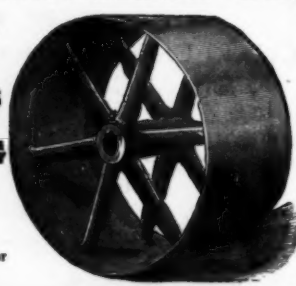
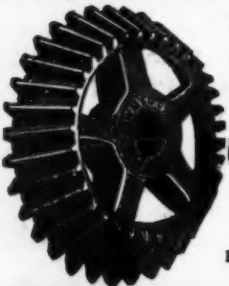
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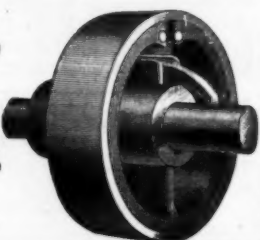
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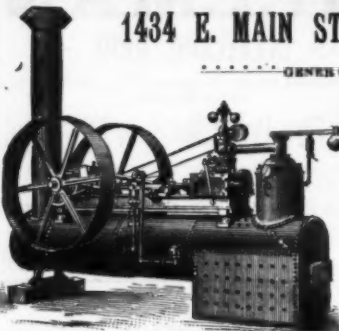
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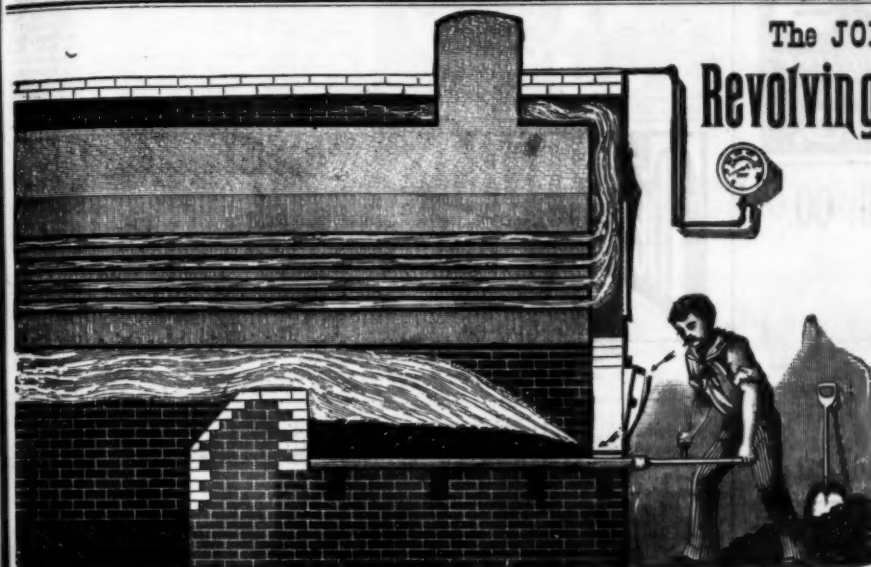
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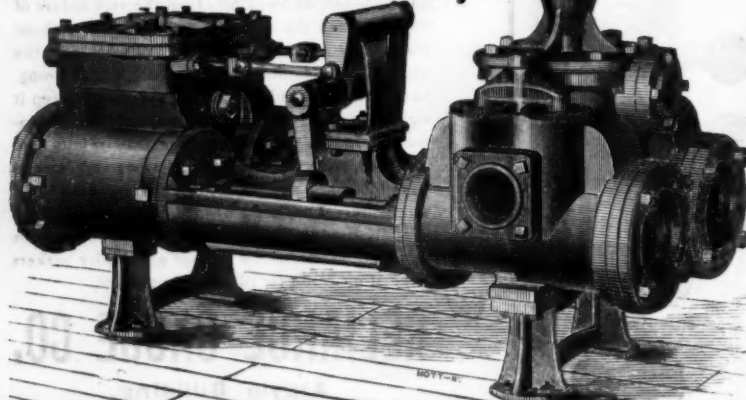
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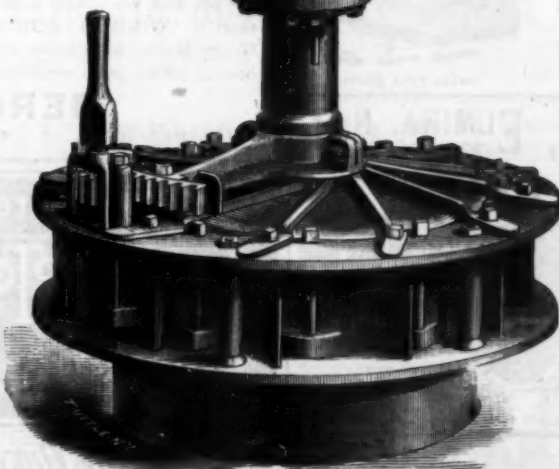
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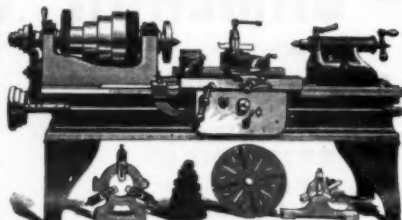
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